

<b>EFFLUENT LIMITATIONS: OUTFALL # 006 Black Walnut Shell (BWS) Effluent</b>		
<b>Parameter<sup>a</sup></b>	<b>Average Monthly<sup>b</sup></b>	<b>Maximum Daily<sup>c</sup></b>
Total Chromium, lbs/day	2.1	5.1
Cyanide, lbs/day	0.53	1.27
Total Aluminum, lbs/day	23.4	46.8
Oil & Grease, lbs/day	655.1	710.5
TSS, lbs/day	709.4	1,142.1
<sup>a</sup> Discharge quantities of Chromium, Aluminum, Oil & Grease, and TSS shall be calculated on a net basis by subtracting plant intake water loadings from Outfall 006 loadings. When sample measurements for compliance with mass-based limits fall below the MDL, the average loading shall be calculated using a concentration value of zero. When sample measurements for compliance with mass-based limits fall above the MDL, the average loading shall be calculated using the measured concentration.		
<sup>b</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
<sup>c</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

### 3. Industrial Treatment Plant Effluent (Outfall 002)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated process wastewater into the wastewater settling lagoon subject to complying with the following limitations:

<b>EFFLUENT LIMITATIONS: OUTFALL # 002 Industrial Wastewater Treatment (IWT) Plant Effluent</b>		
<b>Parameter</b>	<b>Average Monthly<sup>a</sup></b>	<b>Maximum Daily<sup>b</sup></b>
Total Chromium, lbs/day	0.57	1.36
Cyanide, lbs/day	0.38	0.91
Total Zinc, lbs/day	1.89	4.54
Total Aluminum, lbs/day	9.93	20.1
Oil & Grease, lbs/day	37.2	62.1
TSS, lbs/day	60.4	127.2
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		

<sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

4. Sanitary Sewage Effluent (Outfall 003)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated sanitary sewage into the wastewater lagoon subject to complying with the following limitations:

<b>EFFLUENT LIMITATIONS: OUTFALL # 003 Sanitary Wastewater</b>		
<b>Parameter</b>	<b>Average Monthly<sup>a</sup></b>	<b>Average Weekly<sup>a</sup></b>
BOD <sub>5</sub>	30 mg/L, 48 lbs/day	45 mg/L, 72 lbs/day
TSS	30 mg/L, 48 lbs/day	45 mg/L, 72 lbs/day
Fecal Coliform <sup>b</sup>	200 colonies/100 ml	400 colonies/100 ml
<sup>a</sup> The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
<sup>b</sup> Total residual chlorine shall be maintained which is sufficient to attain the fecal coliform limits specified above. Chlorine concentrations in excess of that necessary to reliably achieve these limits shall be avoided.		

B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

At the 7Q10 river flow, the mixing zone shall not utilize greater than 25 percent of the flow (dilution factor of 5.86; 17.1% effluent). A zone where acute criteria may be exceeded shall not utilize greater the 2.5 percent of the flow (dilution factor of 1.39; 71.8% effluent).

## S2. MONITORING REQUIREMENTS

The Permittee shall monitor in accordance with the following schedule:

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Final Effluent (Outfall 001)	Flow	mgd	Final Effluent Monitoring Station	Continuous <sup>a</sup>	Meter
	pH <sup>b</sup>	s.u.	"	"	"
	Temperature	°F	"	"	"

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
	Total Zinc	µg/L	"	2/week	24-hour composite
	Total Lead	µg/L	"	"	"
	Total Cadmium	µg/L	"	"	"
	Total P (as P) <sup>c</sup>	ug/L, lbs/day	"	"	"
	Total Reactive P (as P) <sup>c</sup>	ug/L, lbs/day	"	"	"
	CBOD <sub>5</sub>	mg/L, lbs/day	"	"	"
	Ammonia (as N) <sup>c</sup>	mg/L, lbs/day	"	"	"
	Total PCBs <sup>d</sup>	pg/L	"	2/month	"
Black Walnut Shell Effluent (Outfall 006)	Flow	mgd	BWS Effluent	Continuous*	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Cyanide <sup>e</sup>	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"
	Oil & Grease	"	"	"	grab
Groundwater Remediation Flow (Outfall 007)	Flow	mgd	Discharge Line	Continuous*	Meter
Black Walnut Shell Influent	Flow	mgd	Lagoon Effluent	Continuous*	Meter
	Total PCBs <sup>f</sup>	ng/L, g/day	"	1/every other week	24-hour composite
Industrial Wastewater Treatment (Outfall 002)	Flow	gpd	IWT Effluent	Continuous*	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Cyanide <sup>e</sup>	"	"	"	"
	Total Zinc	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
	Total P (as P)	"	"	"	"
	Oil & Grease	"	"	"	grab
Sanitary Wastewater (Outfall 003)	Flow	gpd	Sanitary Treatment Plant Effluent	Continuous*	Meter
	pH	s.u.	"	5/week	grab
	BOD <sub>5</sub>	mg/L, lbs/day	"	1/week	24-hour composite
	TSS	mg/L, lbs/day	"	"	"
	Total P (as P)	mg/L, lbs/day	"	2/week	"
	Fecal Coliform	Colonies /100ml	"	1/week	grab
Final Effluent (Outfall 001)	Acute Toxicity Testing	see S5.A.	Final Effluent Monitoring Station	1/quarter <sup>g</sup>	24-hour composite
	Chronic Toxicity Testing	see S6.A.	"	"	"
River Intake (Spokane River)	Flow	gpd	Intake Structure	Continuous <sup>*,h</sup>	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Total Zinc	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"
	Total P (as P) <sup>c</sup>	ug/L, lbs/day	"	"	"
	Oil & Grease	mg/L, lbs/day	"	"	grab

\* Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken four (4) times per day when continuous monitoring is not possible.

<sup>a</sup> Shall be determined by adding the Outfall 006 and Outfall 007 flowrates.

<sup>b</sup> For facilities which continuously monitor and record pH values, the number of minutes the pH value was below or above the permitted range shall be recorded for each day and the total minutes for the month reported, the durations when values were above and below the permitted range shall be reported separately. The instantaneous maximum and minimum pH shall be reported monthly.

<sup>c</sup> The total phosphorus (as P) and ammonia method detection and quantification levels shall be reported with the analytical results.

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
<sup>d</sup> Total PCBs for Outfall 001 shall be tested using a method that achieves a 50 pg/L target method detection limit, or lower, for all PCB congeners.					
<sup>e</sup> Periodic analyses for cyanide will not be required if both of the following conditions are met: <ol style="list-style-type: none"> <li>1. The first wastewater sample taken each calendar year is analyzed and found to contain less than 0.07 mg/l cyanide; and</li> <li>2. The Permittee certifies in writing to Ecology that cyanide is not and will not be used in the aluminum forming and finishing operations.</li> </ol>					
<sup>f</sup> Total PCBs for the BWS filter influent shall be tested using EPA method 8082 (low-level) having a target detection limit of 5 ng/L for aroclor 1248.					
<sup>g</sup> Quarters are defined as follows: 1 <sup>st</sup> – January to March; 2 <sup>nd</sup> – April to June; 3 <sup>rd</sup> – July to September; and 4 <sup>th</sup> – October to December.					
<sup>h</sup> Shall be determined by difference from other metered flowrates.					

#### B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

#### C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations. Calibration records shall be maintained for at least three years.

#### D. Laboratory Accreditation

All monitoring data required by the Ecology shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, turbidity, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

### **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology shall constitute a violation of the terms and conditions of this permit.

#### **A. Reporting**

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. DMR forms shall be postmarked or received no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Total PCB analysis data shall be submitted no later than 15 days after receipt of the laboratory results. Unless otherwise specified, all toxicity test data shall be submitted within sixty (60) days after the sample date. The report(s) shall be sent to: The Department of Ecology, Eastern Regional Office, 4601 N. Monroe, Spokane, Washington 99205.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date; sample location; date of analysis; parameter name; CAS number; analytical method/ number; method detection limit (MDL); laboratory practical quantitation limit (PQL); reporting units; and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

#### **B. Records Retention**

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Reporting

1. The permittee must immediately report the following occurrences of noncompliance:
  - a. any noncompliance that may endanger health or the environment;
  - b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part S4.B, "Bypass Procedures");
  - c. any upset that exceeds any effluent limitation in the permit (See G.16, "Upset");
  - d. any violation of limitations listed in Permit Condition S1.A.; or
  - e. any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.
2. The Permittee must also provide a written report within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1, above. The written report must contain:
  - a. a description of the noncompliance and its cause;
  - b. the period of noncompliance, including exact dates and times;
  - c. the estimated time noncompliance is expected to continue if it has not been corrected;
  - d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
  - e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.
3. The permittee must report all other instances of noncompliance, not required to be reported immediately, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in S3.E.2 above.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

The Permittee shall maintain a copy of this permit at the facility.

**S4. BEST MANAGEMENT PRACTICES (BMP) PLAN**

The goal of the BMP plan is to maintain, or lower, effluent concentrations of total phosphorus, CBOD, and ammonia at or below current discharge levels.

By July 1, 2012, the permittee shall develop a BMP plan and submit it to Ecology for review and approval. The objective of this plan is to identify pollution prevention and wastewater reduction opportunities. The plan shall include the following:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list shall include the name of a designated team leader.
2. A description of current and past BMPs and their effectiveness.
3. Identification of technical/economical evaluation of new BMPs. BMPs should include: substitution of materials; reformulation or redesign of products; modification of equipment, facilities, technology, processes, and procedures; and improvement in management, inventory control, materials handling or general operational phases of the facility.
4. A schedule for implementation of economically feasible BMPs.
5. Methods used for measuring progress towards the BMP goal and updating the BMP plan.
6. A description of the testing of any wastestreams (not already required under Special Condition S3. of this permit) and products used within the facility for total phosphorus, CBOD, and ammonia. A summary of these results should also be provided.

Thereafter, the permittee shall submit annual reports to Ecology by July 1<sup>st</sup> of every year. The annual report shall include: a) all BMP plan monitoring results for the year; b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; and c) any updates to the BMP plan.

This permit may be modified, or revoked and reissued, to revise or remove the requirements of this Section based on information collected under this Section.



## S5. SCHEDULE OF COMPLIANCE FOR TOTAL PHOSPHORUS, CBOD, AND AMMONIA

Target Pursuit Action	Compliance Date
Annual Status Reports <sup>a</sup>	July 1 <sup>st</sup> of each year
Delta Elimination Plan <sup>b</sup>	July 1, 2013
Technology Selection Protocol for Treatment Technology <sup>c</sup>	July 1, 2013
Engineering Report for Treatment Technology <sup>d</sup>	July 1, 2014
Phosphorus Treatment Technology	July 1, 2016 <sup>e</sup>
Meet Final Water Quality Based Effluent Limits <sup>f</sup>	July 1, 2021

<sup>a</sup> The Annual Status Report shall, at a minimum, include detailed updates on the treatment technology (status of report preparation, construction, and/or performance reviews, etc.) and delta elimination plans (status of report preparation, implementation progress, accounting of delta credits earned and expended, etc.). The report shall also include an assessment on the progress of meeting the final water quality based effluent limits (WQBELs) through the combination of treatment technology and delta elimination.

<sup>b</sup> Delta elimination plan will include a schedule for other phosphorus, CBOD and ammonia removal actions such as conservation, effluent re-use, and supporting regional non-point source control efforts to be established.

The delta elimination plan may also include:

- A demonstration that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment, is not reactive and is not a nutrient source. This demonstration must consider findings and recommendations from the University of Washington/ WERF bioavailability lab study and the DO TMDL Implementation Advisory Committee. The demonstration may also include results from subsequent monitoring and modeling of bio-available phosphorus. Ecology will recognize the demonstration, that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment, is not reactive and is not a nutrient source through a modification to the Spokane River DO TMDL. Ecology will incorporate any revised WQBELs based on the modified DO TMDL by the second permit cycle, or earlier.
- Any approved trades between Permittees and/or nonpoint sources to reduce nutrients (total phosphorus, CBOD, and ammonia) to the Spokane River and Lake Spokane consistent with the Water Quality Trading Framework developed by Ecology the DO TMDL Implementation Advisory Committee.
- An analysis, subject to Ecology approval and public review and comment, that provides a pollutant loading equivalency relating phosphorus, CBOD and ammonia.
- Implementation of a 'bubble limit' concept for interested Spokane River dischargers where the sum of all wasteload allocations becomes a cap or bubble. Under the bubble limit concept, a discharger is not considered in violation of their individual WQBEL, as long as the collective bubble limit is met during the same reporting period.

The delta elimination plan, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's final WQBELs in ten (10) years.

<sup>c</sup> A comprehensive technology selection protocol for choosing the most effective feasible technology for seasonally removing the applicable pollutant from the effluent. If pilot testing is a part of the protocol, there will be appropriate provisions for quality assurance and control. The protocol will include a preliminary schedule for construction of the treatment technology.

<sup>d</sup> After the Permittee implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen technology, including any updates to the construction schedule. The Engineering Report will (if necessary) be accompanied by amendments to the schedule and substance of the target pursuit actions so that in combination with the Engineering Report on expected technology performance, there is reasonable assurance of meeting the final WQBELs in ten (10) years.

<sup>e</sup> The Permittee must confirm the installation and operation of the phosphorus treatment technology in writing to Ecology.

<sup>f</sup> The wasteload allocations for ammonia, total phosphorus, and CBOD are 9.0, 3.21, and 462.7 lbs/day seasonal average from March to October, respectively (0.07, 0.025, and 3.6 mg/L, respectively, at a discharge flow of 15.4 mgd). The final WQBELs are shown below:

<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October</b>	
<b>Parameter</b>	<b>Season Average</b>
Ammonia, lbs/day	9.0
Total Phosphorus, lbs/day	3.21
CBOD, lbs/day	462.7

Compliance with these limitations will be determined by the mass of pollutant measured in the effluent combined with any credits from the Delta Elimination Plan following Ecology approval and public review and comment. Ecology may adjust the final water quality based effluent limitations on the basis of new information following a revision to the Spokane River DO TMDL. This new information may include: the fraction of bio-available phosphorus in the effluent and alternate modeled water quality based effluent limits extended into February or January. Any adjustment of the final effluent limitations that result in less stringent limitations must ensure the dissolved oxygen responsibility for Avista identified in Table 7 of the DO TMDL remains unchanged as determined through the use of the DO TMDL model and is subject to the provisions of the Clean Water Act for deriving limitations in section 303(d)(4)(A), 42 U.S.C. § 1313(d)(4)(A) as well as the anti-backsliding provisions of the Clean Water Act, including the exceptions in section 402(o)(2) of the Clean Water Act, 33 U.S.C. § 1342(o)(2).

**S6. BLACK WALNUT SHELL FILTRATION LOADING/PCB SOURCE IDENTIFICATION AND REDUCTION****A. Design Criteria**

The following flows and waste loadings for the Black Walnut Shell Filtration System shall not be exceeded:

Average flow: 11 mgd

Total PCB loading: 0.78 g/day

**B. PCB Source Identification and Reduction**

The Permittee shall continue the PCB source identification and cleanup work as stipulated by Amended Order No. 2868. The goal of this work is to reduce PCBs in the effluent to the maximum extent practicable to bring the Spokane River into compliance with applicable water quality standards for PCBs. The Amended Order is incorporated into this permit by reference as Attachment A.

**S7. REGIONAL TOXICS TASK FORCE**

The permittee shall participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force should include NPDES permittees in the Spokane River, conservation/environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Regional Toxics Task Force is to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal, Ecology anticipates that the Task Force functions will:

1. Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River.
2. Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs sources and of other toxics on the 2008 year 303(d) list for the Spokane River.
3. Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River.
4. Review proposed Toxic Management Plans, Source Management Plans, and BMPs.
5. Monitor and assess the effectiveness of toxic reduction measures.
6. Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force and its members. This information shall be made publicly available by means of a website and other appropriate means.

To discharge these functions the Task Force may provide for an independent community technical advisor(s) funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public.

By November 30, 2011, the Permittee(s) shall provide Ecology with the organizational structure, specific goals and governing documents, including funding, of the Regional Task Force.

If Ecology determines the Regional Toxics Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

## **S8. OPERATION AND MAINTENANCE**

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

### **A. Operations and Maintenance Manual**

An updated Operation and Maintenance (O&M) Manual shall be submitted to Ecology for approval by April 1, 2012. It shall conform to the requirements of WAC 173-240-150. In addition to the requirements of WAC 173-240-150(1) and (2), the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Plant maintenance procedures.
3. The treatment plant process control monitoring schedule.

Substantial changes or updates to the O&M Manual shall be submitted to Ecology for review and approval whenever they are incorporated into the manual.

The approved Operations and Maintenance Manual shall be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

A Treatment System Operating Plan (TSOP) shall be submitted to Ecology as the initial chapter of the updated O&M Manual. This chapter shall be entitled the "Treatment System Operating Plan." For the purposes of this NPDES permit, a TSOP is a concise summary of specifically defined elements of the O&M Manual. The TSOP shall not conflict with the O&M Manual and shall include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1 at the production levels used in developing these limitations.
2. In the event of production rates, which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

An updated Treatment System Operating Plan (TSOP) shall be submitted to Ecology with the application for renewal 180 days prior to expiration of the permit. This plan shall be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance

during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

Ecology is properly notified of the bypass as required in condition S3.E of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify Ecology at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

**S9. APPLICATION FOR PERMIT RENEWAL**

The Permittee shall submit an application for renewal of this permit by December 30, 2015.

**S10. SOLID WASTE DISPOSAL**

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

**S11. NON-ROUTINE AND UNANTICIPATED DISCHARGES**

A. Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee shall contact Ecology and **at a minimum** provide the following information:

1. The nature of the activity that is generating the discharge.
2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
3. The total volume of water expected to be discharged.
4. The results of the chemical analysis of the water. The water shall be analyzed for all constituents limited for the Permittee's discharge. The analysis shall also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limitations as established in Condition S1 of this permit, water quality standards, sediment management standards, and any other limitations imposed by Ecology.
5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate shall be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
6. If the proposed discharge is to a municipal storm drain and is approved by Ecology, the Permittee shall notify the municipality of the discharge.

- B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge. Authorization from Ecology will be by letter to the Permittee or by an Administrative Order.

## **S12. SPILL PLAN**

The Permittee shall by April 1, 2012, submit to Ecology an update to the existing Spill Control Plan for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters. The Permittee shall review and update the Spill Plan, as needed, at least annually. Changes to the plan shall be sent to Ecology. The plan and any supplements shall be followed throughout the term of the permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

## **S13. ACUTE TOXICITY**

### **A. Effluent Characterization**

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC<sub>50</sub>). The percent survival in 100% effluent shall also be reported.

Testing shall begin within sixty (60) days of the permit effective date.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).



2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%.
2. Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

**The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).**

In the event of failure to pass the test described in subsection C of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of Ecology.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.B of this permit. The ACEC equals 71.8% effluent (dilution factor of 1.39).

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless Ecology notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC<sub>50</sub> and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by Ecology as an anomalous test result, the Permittee may notify Ecology that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from Ecology before completing the additional monitoring required in this subsection. The notification to Ecology shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by Ecology that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by Ecology that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to Ecology on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by Ecology shall be used, and results submitted to Ecology as a part of the permit renewal application process.

#### F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by Ecology, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

**S14. CHRONIC TOXICITY****A. Effluent Characterization**

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within sixty (60) days of the permit effective date.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

**B. Effluent Limit for Chronic Toxicity**

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

**The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).**

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of Ecology.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.B pursuant to WAC 173-201A-100. The CCEC equals 17.1% effluent (dilution factor of 5.86).

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless Ecology notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by Ecology as an anomalous test result, the Permittee may notify Ecology that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from Ecology before completing the additional monitoring required in this subsection. The notification to Ecology shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by Ecology that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by Ecology that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to Ecology on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by Ecology shall be used, and results submitted to Ecology as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by Ecology, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

## GENERAL CONDITIONS

### G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology shall be signed and certified.

- A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
- B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to Ecology.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

“I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

### G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.



- B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

### **G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - 3. A material change in quantity or type of waste disposal.
  - 4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
  - 5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
  - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - 7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:
  - 1. A material change in the condition of the waters of the state.
  - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

#### **G4. REPORTING PLANNED CHANGES**

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### **G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

#### **G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### **G7. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to Ecology.

**A. Transfers by Modification**

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

**G8. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G9. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G10. DUTY TO PROVIDE INFORMATION**

The Permittee shall submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to Ecology upon request, copies of records required to be kept by this permit.

**G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G12. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G13. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by Ecology.

**G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

**G15. UPSET**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

**G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**G17. DUTY TO COMPLY**

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G18. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

**G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

**G20. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee shall give advance notice to Ecology by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

**G21. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it shall promptly submit such facts or information.

**G22. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 µg/L).
  2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
1. Five hundred micrograms per liter (500µg/L).
  2. One milligram per liter (1 mg/L) for antimony.
  3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  4. The level established by the Director in accordance with 40 CFR 122.44(f).

## **G23. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

**APPENDIX A - ECOLOGY AMENDED ORDER NO. 2868**

**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

**FILE COPY**

IN THE MATTER OF COMPLIANCE BY     )  
Kaiser Aluminum and Chemical Corporation     )  
Trentwood Works     )

AMENDED ORDER No. 2868

To:   Mr. Peter S. Bunin  
      Vice President and General Manager Flat Rolled Products Division  
      Kaiser Aluminum & Chemical Corporation  
      Trentwood Works  
      P.O. Box 15108  
      Spokane, WA 99215-5108

For the site located at Kaiser Aluminum and Chemical Corporation Trentwood Works, 15000 E. Euclid Avenue, Spokane, WA 99215.

This Amended Order requires Kaiser Aluminum & Chemical Corporation to take the actions described below to comply with Chapter 90.48 RCW and the rules and regulations of the Department of Ecology. This Amended Order supersedes Administrative Order No. 1788 which is hereby rescinded.

**I.       RECOGNITION OF THE DEPARTMENT'S JURISDICTION**

Chapter 90.48.030 of the Revised Code of Washington (RCW) provides the Department of Ecology the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, water courses, and other surface and underground waters of the State of Washington.

**II.       FINDING OF FACT**

RCW 90.48.120(2) authorizes the Department to issue Administrative Orders requiring compliance whenever it determines that a person has violated or created a substantial potential to violate any provision of Chapter 90.48 RCW or fails to control the polluting content of waste to be discharged to waters of the state. The Department's determination that a violation has occurred, or that there was a substantial potential for a violation to occur is based on the following facts:

**#1:** During the months of November and December 2002 (prior to implementation of effluent filtration upgrades under Agreed Order No. 02WQER-3487 in spring 2003) the Kaiser Aluminum and Chemical Corporation Trentwood Works discharged significant amounts of PCBs to the Spokane River. Specifically; 14.78 million gallons (MG) @ 25.9 µg/l PCBs on November 18, 2002, 8.77 MG @ 3.22 µg/l PCBs on December 2, 2002, 16.93 MG @ 48.2 µg/l PCBs on December 16, 2002 and 16.46 MG @ 3.42 µg/l PCBs on December 29, 2002.

These amounts are much greater than previously indicated for the Trentwood Works in Kaiser Aluminum & Chemical Corporation's March 29, 2002 engineering report and are at concentrations which calculate as greatly exceeding Human Health criteria of 170 pg/l contained in 40 CFR 131.36 (known as the National Toxics Rule) and referenced in chapter 173-201A-040 (5) WAC.

**#2:** Kaiser Trentwood's NPDES Permit No. WA-0000892 General Condition G5 says "Facilities shall be constructed and operated in accordance with the approved plans".



Kaiser Trentwood Amended Order #2868

Page 2 of 4

October 12, 2005

The Department of Ecology's May 29, 2002 approval of Kaiser Trentwood's BWSF PCB treatment system was based on achievement of the effluent discharge loading called for in the Filter Influent Design Basis (table 5) of the March 29, 2002 Engineering Report. At the approved maximum flow of 11 MGD and the projected BWSF treatment system PCB removal efficiency, this gives an influent loading of 0.78 gram/day total PCBs. Monitoring reporting has not been adequate to determine if these conditions are being met.

#3: Kaiser Trentwood currently conducts biweekly effluent monitoring following the required HRMS 1668A analytical procedure on the final Outfall #001 discharge. This method provides highly accurate low-level final discharge information but is inherently slow from a laboratory turn-around schedule standpoint.

### III. Corrective Actions

For these reasons and in accordance with RCW 90.48.120 (2) it is **ORDERED** that the Kaiser Aluminum & Chemical Corporation take the following actions.

1. Submit a scope of work for the identification and cleanup of PCBs in the facility's wastewater collection and treatment system for Ecology review and approval by November 1, 2005. This scope of work shall, at a minimum, include:
  - a) An evaluation of causes for the high PCB values in November and December 2002, and the implementation of procedures (including those listed in response to other sections of this Order) designed to prevent high PCB values in the future and provide prompt reporting of any future high PCB values (see Corrective Action #2);
  - b) A diagram of the wastewater collection system;
  - c) Procedures for identifying PCBs within wastewater collection and treatment system;
  - d) Procedures for sediment PCB sampling within the wastewater collection and treatment system;
  - e) Proposed sampling locations
  - f) Proposed collection and disposal alternatives for any PCB sediment within the wastewater collection and treatment system;
  - g) A summary of previous cleanup and PCB source identification efforts as a part of the basis for the current and upcoming efforts and
  - h) A proposed schedule for the above items.

Kaiser Trentwood Amended Order #2868  
Page 3 of 4  
October 12, 2005

All activities related to the identification and cleanup of PCBs in the wastewater collection and treatment system shall be completed according to the schedule in the approved scope of work. Kaiser shall provide Ecology a report summarizing the status of such identification and cleanup on a semi-annual basis.

The first report will be submitted on or before November 1, 2005 and will summarize the status of identification and cleanup activities undertaken from January through June. The second report will be submitted on or before March 1, 2006 and will summarize the status of identification and cleanup activities undertaken from July through December. Subsequent reports will be submitted on or before September 1 and March 1 and will summarize the status of identification and cleanup activities undertaken from January through June and July through December respectively until the work is complete.

2. Implement the following additional monitoring and reporting activities by November 1, 2005 to document the operation of the BWSF system, assess influent loading conditions/sources and provide for the expedited turn-around of data:
  - a) Collect biweekly samples of the effluent from the lagoon (influent to the BWSF system). These samples shall be submitted for analysis utilizing low-level 8082 laboratory procedures that have a target detection limit of 5 ng/L for aroclor 1248.
  - b) Collect biweekly samples of the influent to the lagoon from internal outfalls #005 (north outfall) and internal outfall #004 (south outfall). Samples shall be archived for potential later use to respond or track back on the source of an influent upset detected under item 2a. Archived samples not submitted for analysis shall be maintained for a minimum of 30 days after the laboratory results from the item 2a samples have been received by the Department of Ecology.
  - c) Collect and summarize the daily flow information from the BWSF system to provide information that (in conjunction with item 2a) can be used to estimate influent PCB loading. BWSF system flows may be calculated using either the discharge flows feeding the individual BWSF filter vessels or the lagoon influent flow measurements.
  - d) In the event that any measured influent PCB loading to the BWSF system is calculated to exceed 0.78 grams/day (based on BWSF design parameters) the Department of Ecology shall be notified within one working day and track back investigations initiated. This shall include analysis of the archived lagoon influent samples from that date collected under item 2b. The results of the track back investigation shall be reported to the Department of Ecology as part of the appropriate semi-annual PCB cleanup report.
  - e) As part of the normal monthly NPDES discharge monitoring reports, the following additional information shall be provided for the previous calendar month:

Kaiser Trentwood Amended Order #2868

Page 4 of 4

October 12, 2005

- i. The sample collection date for final Outfall #001, Outfall 004, and Outfall 005, BWSFS influent and any other wastewater system PCB samples collected.
- ii. The analysis results for each complete and final wastewater system PCB analysis report received from the laboratory and the date such data was received.
- iii. The concentration, corresponding BWSF daily flow and calculated loading based on laboratory data received during the previous calendar month from items #2c and #2d.
- iv. Daily flow monitoring for the BWSFS for all days of the month.

These actions are required at the location known as Trentwood Works located at 15000 E. Euclid Avenue, Spokane, WA 99215.

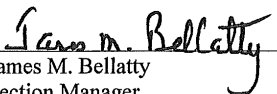
#### IV. AMENDMENTS TO THE CORRECTIVE ACTIONS OR SCHEDULE

Amendments to the corrective actions, schedule and laboratory data reporting requirements may be requested for good cause. To be effective, all amendments must be requested in writing at least thirty (30) days prior to the required implementation date, signed by the person with signatory authority for each party and attached to the agreed order.

Good cause includes, but is not limited to, the following:

- (1) Delays by the Department in reviewing documents submitted by Kaiser;
- (2) Acts of nature, including fire, flood, extreme temperatures, or severe storms; and
- (3) Failures by labs and shipping companies that result in the loss or breakage of samples impacting the availability of analysis results (such circumstances shall be reported to the agency within 15 days of Kaiser's receipt of such information).

**DATED this 12<sup>th</sup> day of October 2005 at Spokane, Washington.**

  
James M. Bellatty  
Section Manager  
Water Quality Program  
Eastern Regional Office

## PROJECT DESCRIPTION

The project will further investigate the interaction between the Spokane River and the aquifer in the Sullivan Road and Plante's Ferry areas. If the project budget allows, the project will be extended to include the area between Flora Road and Sullivan.

The project will involve collection of water level data in new and existing wells adjacent to and in the general proximity of the river in the project area, collection of surface water flow and elevation data from existing bridges (Sullivan, Trent, Centennial Trail) and elevation data from other stream bank locations using benchmarks (to be installed), and establishing a uniform datum in the study area to correlate the data set. Ideally, the datum will be consistent with the datum established for the ongoing Spokane Valley-Rathdrum Prairie Aquifer Study. The surface and ground water level elevations will be collected on a regular basis over a period of at least one year to evaluate the seasonal characteristics of the hydrologic system.

The proposed new monitoring wells will be constructed of 2" diameter PVC and will likely be installed in locations in the parking areas for the Spokane County Parks Plante's Ferry soccer fields and/or the parking area for the Centennial Trail trailhead at Plante's Ferry Bridge. The exact number and locations of the new monitoring wells is yet to be determined. Existing wells in the area of Sullivan Road and Mirabeau Point will also be monitored. Project surveying and establishment of a uniform datum will be performed by Spokane County.

The funds will be managed by Spokane County Water Resources staff. A unique project code and specific task codes will be established to account for all funds. Financial and technical updates will be provided to Ecology as requested.

A preliminary budget for the project is as follows:

Drilling new wells, including instrumentation for depth to water measurements	200 feet @ \$100/foot = \$20,000
Surveying to establish a uniform datum and 2-3 stream bank benchmarks	\$5,000
Labor (County Staff) to install wells, collect/compile data, maintain database and manage project	\$5,000

Spokane County will coordinate with the Spokane Community College Water Resources department to provide volunteer opportunities for students to participate in the project.

Issuance Date: June 16, 2011

Effective Date: July 1, 2011

Expiration Date: June 30, 2016

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA-002447-3**

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

City of Spokane Riverside Park Water Reclamation Facility and  
Combined Sewer Overflows (CSOs)  
4401 N. Aubrey L. White Parkway  
Spokane, WA 99205  
And  
Spokane County (Pretreatment Program)  
Division of Utilities – 1026 W. Broadway Ave.  
Spokane, WA 99260-0430

<u>Plant Location:</u> 4401 N. Aubrey L. White Parkway; Spokane	<u>Receiving Water:</u> Spokane River
<u>Water Body I.D. No.:</u> WA-54-1020 (old) QZ45UE (new)	<u>Discharge Location:</u> Latitude: 47.695278° N Longitude: 117.473889° W
<u>Plant Type:</u> Activated Sludge	<u>CSO Outfalls:</u> 22 Outfalls

is authorized to discharge in accordance with the special and general conditions that follow.

---

James M. Bellatty  
Water Quality Section Manager  
Eastern Regional Office  
Washington State Department of Ecology

## TABLE OF CONTENTS

SUMMARY OF PERMIT REPORT SUBMITTALS.....	5
<b>SPECIAL CONDITIONS</b>	
S1. Discharge LIMITATIONS.....	7
A. Interim Effluent Limitations	
B. Effluent Limitations for Compliance with the Spokane River DO TMDL	
C. Mixing Zone Descriptions	
S2. MONITORING REQUIREMENTS .....	11
A. Monitoring Schedule	
B. Sampling and Analytical Procedures	
C. Flow Measurement	
D. Laboratory Accreditation	
S3. Reporting and recordkeeping requirements .....	16
A. Reporting	
B. Records Retention	
C. Recording of Results	
D. Additional Monitoring by the Permittee	
E. Noncompliance Notification	
F. Maintaining a Copy of This Permit	
S4. FACILITY LOADING .....	18
A. Design Criteria	
B. Plans for Maintaining Adequate Capacity	
C. Duty to Mitigate	
D. Notification of New or Altered Sources	
S5. OPERATION AND MAINTENANCE .....	21
A. Certified Operator	
B. O & M Program	
C. Short-term Reduction	
D. Electrical Power Failure	
E. Prevent Connection of Inflow	
F. Bypass Procedures	
G. Operations and Maintenance Manual	
S6. PRETREATMENT (CITY OF SPOKANE) .....	24
A. General Requirements	
B. Monitoring Requirements	
C. Reporting of Monitoring Results	
D. Local Limit Update	
E. Mercury Control Plan	
S7. PRETREATMENT (Spokane County).....	31
A. General Requirements	

B.	Monitoring Requirements	
C.	Reporting of Monitoring Results	
D.	Local Limit Update	
E.	Mercury Abatement and Control Plan	
S8.	RESIDUAL SOLIDS .....	37
S9.	SPILL PLAN .....	37
S10.	ACUTE TOXICITY .....	38
A.	Effluent Testing Requirements	
B.	Sampling and Reporting Requirements	
S11.	CHRONIC TOXICITY.....	39
A.	Effluent Testing Requirements	
B.	Sampling and Reporting Requirements	
S12.	RECEIVING WATER AND EFFLUENT STUDY.....	41
A.	General Requirements	
B.	Protocols	
C.	Quality Assurance/Quality Control Procedures	
S13.	COMBINED SEWER OVERFLOWS .....	43
A.	Discharge Locations	
B.	Combined Sewer Overflow Report	
C.	Nine Minimum Controls	
D.	Combined Sewer Overflow Reduction Plan	
E.	CSO Maintenance and Inspection Plan	
F.	CSO Maintenance and Inspection Report	
G.	CSO Compliance Schedule	
H.	Wet Weather Operation of Wastewater Treatment Facility.	
S14.	RECLAMATION AND REUSE .....	48
A.	Reclamation and Reuse Pilot and Demonstration Projects	
B.	Reclaimed Water Limitations ( Reserved for Future Use)	
C.	Reclaimed Water Monitoring Requirements ( Reserved for Future Use)	
D.	Reclamation and Reuse Implementation	
E.	Bypass Prohibited	
F.	Reliability	
G.	Use Area Responsibilities	
H.	Service and Use Area Agreement	
I.	Reclaimed Water Ordinance	
J.	Irrigation Use	
S15.	COMPLIANCE SCHEDULE.....	51
A.	Engineering Report Update	
B.	Project Manual (Plans and Specifications)	
C.	Construction Quality Assurance Plan	

D. Verification of Construction and Start up Completion for Compliance with  
Spokane River and Lake Spokane DO TMDL

S16. REGIONAL TOXICS TASK FORCE .....53

S17. APPLICATION FOR PERMIT RENEWAL .....54

**GENERAL CONDITIONS**

G1. SIGNATORY REQUIREMENTS.....55

G2. RIGHT OF INSPECTION AND ENTRY .....56

G3. PERMIT ACTIONS.....56

G4. REPORTING PLANNED CHANGES .....57

G5. PLAN REVIEW REQUIRED .....58

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES.....58

G7. TRANSFER OF THIS PERMIT .....58

G8. REDUCED PRODUCTION FOR COMPLIANCE .....59

G9. REMOVED SUBSTANCES .....59

G10. DUTY TO PROVIDE INFORMATION.....59

G11. OTHER REQUIREMENTS OF 40 CFR.....59

G12. ADDITIONAL MONITORING .....59

G13. PAYMENT OF FEES .....59

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS .....59

G15. UPSET .....60

G16. PROPERTY RIGHTS.....60

G17. DUTY TO COMPLY .....60

G18. TOXIC POLLUTANTS.....60

G19. PENALTIES FOR TAMPERING .....60

G20. REPORTING ANTICIPATED NON-COMPLIANCE.....61

G21. REPORTING OTHER INFORMATION.....61

G22. COMPLIANCE SCHEDULES .....61

Appendix A .....62



**SUMMARY OF PERMIT REPORT SUBMITTALS**

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	August 15, 2011
S3.E	Noncompliance Notification	As necessary	---
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	---
S4.C.	Notification of New or Altered Sources	As necessary	---
S4.E.	Waste load Assessment	Annually	July 1, 2011
S5.G.	Operations and Maintenance Manual Update	1/permit cycle	December 1, 2014
S6.A.2.	Accidental Spill Plan	1/permit cycle	October 1, 2014
S6.A.5.	Pretreatment Report for City of Spokane	1/year	March 31, 2012
S6.D	Local Limits update	1/permit cycle	October 15, 2012
S6.E	Mercury Control Plan	1/permit cycle	February 1, 2016
S7.A.5.	Pretreatment Report for Spokane County	1/year	May 1, 2011
S7.D	Local Limits update	1/permit cycle	August 15, 2012
S7.E	Mercury Control Plan	1/permit cycle	February 15, 2016
S9.	Spill Plan	1/permit cycle	October 1, 2014
S12.A.2	Toxics Management Plan	Annually	September 15, 2012
S12.B.	QAPP for PCBs, PBDE, Dioxins	1/permit cycle	March 15, 2012
S13.B	Combined Sewer Overflow Report	Annually	October 1, 2011
S13.D	Combined Sewer Overflow Reduction Plan Amendment	As needed	---
S13.E	Combined Sewer Overflow (CSO) Maintenance and Inspection Plan Update	Annually	October 1, 2011
S13.F	CSO Maintenance and Inspection Report	Annually	March 1, 2012
S15.A.	Engineering Report Submission	1/permit cycle	January 3, 2013

Permit Section	Submittal	Frequency	First Submittal Date
S15.B.	Contract Documents submitted for construction of phosphorus removal process units to achieve Final TP effluent limitations	1/permit cycle	June 30, 2014
S15.D	Certificate of Construction and Start up Completion for Compliance with Spokane River and Lake Spokane DO TMDL WLAs	1/permit cycle	March 1, 2018
S16	Regional Toxics Task Force organizational and governing documents.	1/permit cycle	November 30, 2011
S17	Application for Permit Renewal	1/permit cycle	January 1, 2016
G1.	Notice of Change in Authorization	As necessary	---
G4.	Reporting Planned Changes	As necessary	---
G5.	Engineering Report for Construction or Modification Activities	As necessary	---
G21	Reporting Anticipated Non-compliance	As necessary	---
G22	Reporting Other Information	As necessary	---

## SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

#### A. Interim Effluent Limitations

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

Low Flow Season (July-Oct) <b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 005A</b>		
Parameter	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5 day)	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Total Suspended Solids	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH <sup>c</sup>	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Total PCBS	See Section S12.A.2, S16 and footnote f	
Parameter	Average Monthly	Maximum Daily <sup>b</sup>
Total Residual Chlorine	8.5 µg/L, 3.12 lbs/day	22.2 µg/L, 14.26 lbs/day
Total Ammonia (as NH <sub>3</sub> -N) <sup>d</sup>	3.1 mg/L, 1,112 lbs/day	7.5 mg/L, 2,690 lbs/day
Phosphorus (total as P)	See Note e below	
Cadmium (total recoverable)	0.076 ug/L	0.233 ug/L
Lead (total recoverable)	0.772 ug/L	1.34 ug/L
Zinc (total recoverable)	53.8 µg/L	72.6 µg/L
High Flow Season (Nov-June) <b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 005A</b>		
Parameter	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5 day)	30 mg/L, 10,759 lbs/day 85% removal of influent BOD	45 mg/L, 16,138 lbs/day
Total Suspended Solids	30 mg/L, 10,759 lbs/day 85% removal of influent TSS	45 mg/L, 16,138 lbs/day
Phosphorus (total as P)	See Note e below	See Note e below
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH <sup>c</sup>	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Parameter	Average Monthly	Maximum Daily <sup>b</sup>
Total Residual Chlorine	8.5 µg/L, 4.3 lbs/day	22.2 µg/L, 24.0 lbs/day
Cadmium (total)	0.113 ug/L	0.212 ug/L

Lead (total)	0.889 ug/L	1.22 ug/L
Zinc (total)	73.4 µg/L	162 µg/L
a The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
b The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		
c Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly. Continuous for digital equipment means data acquisition every 2 minutes.		
d. There are no ammonia toxicity-based effluent limits when the Spokane River's 7-day average flow is greater than 5000 cfs as measured at the USGS gage at Cochran Street. New information can be cause for modification.		
e Seasonal chemical phosphorus removal must be initiated by no later than April 15, or terminate no earlier than October 15. The monthly average shall be calculated using only the days when chemical removal is required. The monthly average effluent limitation shall be 0.63 mg/L. The average weekly effluent limitation shall be 0.95 mg/L.		
f. The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.		

**B. Effluent Limitations for Compliance with the Spokane River DO TMDL**

Beginning **March 1, 2018** the Permittee must have installed the full phosphorus removal process train including chemical addition and have operational the technology needed to comply with the following effluent limitations during the season March 1 to October 31. Beginning **March 1, 2021** the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

(March – Oct) <b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 005A</b>	
<b>Parameter</b>	<b>Seasonal Average Limit Applies March 1 to October 31</b>
Carbonaceous Biochemical Oxygen Demand – 5 day (CBOD <sub>5</sub> ) See notes e and f	1778 lbs/day

Total Phosphorus (as P) See notes e and f	17.8 lbs/day	
Parameter	Seasonal Average Limit	
Total Ammonia (as NH <sub>3</sub> -N) See notes e and f		
For “season” of March 1 to May 31	351 lbs/day	
For “season” of June 1 to Sept. 30	89 lbs/day	
For “season” of Oct. 1 to Oct. 31	351 lbs/day	
Parameter	Average Monthly	Maximum Daily <sup>b</sup>
Total PCBS	See Section S12.A.2, S16 and footnote g	
Total Ammonia (as NH <sub>3</sub> -N) See notes e and f		
For “season” of June 1 to Sept. 30	---	7.5 mg/L
EFFLUENT LIMITATIONS <sup>a</sup> : OUTFALL # 005A		
Parameter	Average Monthly	Average Weekly
Carbonaceous Biochemical Oxygen Demand – 5 day (CBOD <sub>5</sub> ) Nov. 1 thru Feb. <sup>d</sup>	25 mg/L, 8966 lbs/day	40 mg/L, 14,345 lbs/day
Total Suspended Solids <sup>d</sup>	30 mg/L, 10,759 lbs/day	45 mg/L, 16,138 lbs/day
Fecal Coliform Bacteria	200 CFU /100 mL	400 CFU /100 mL
pH <sup>c</sup>	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Parameter	Average Monthly	Maximum Daily <sup>b</sup>
Total Residual Chlorine	8.5 µg/L, 4.3 lbs/day	22.2 µg/L, 24.0 lbs/day
Cadmium (total)	0.076 ug/L	0.233 ug/L
Lead (total)	0.772 ug/L	1.34 ug/L
Zinc (total)	53.8 µg/L	72.6 µg/L
a. The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
b. The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		
c. Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.		
d. The given limits of 30 mg/L and 45 mg/L are default values. During data gathering for		

the “Ten Year” assessment performance based limits will be calculated.
e. Compliance with the effluent limitations for CBOD <sub>5</sub> , NH <sub>3</sub> -N and TP will be based on: 1) a seasonal average with the running seasonal average for the season reported on monthly for tracking compliance with the allowable mass limitation, and 2) a combining of the effluent quality, pollutant equivalencies in term of oxygen depletion and the DO TMDL and pollutant credit earned from implementation of the Offset Plan, following public review and comment and then Ecology approval.
f. Adjustments to the final effluent based on demonstrated pollutant equivalencies or non bioavailable P will be implemented as major permit modifications requiring public notice and comment.
g. The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

Footnotes:

The method detection limit (MDL) for Total phosphorus is to provide a reporting limit of 5 µg/L using the method listed in Appendix A or USEPA method 365.3.

The method detection level (MDL) for total ammonia is to provide a reporting limit of 50 µg/L using the method listed in Appendix A.

These QLs will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department by (nine months after the effective date). The matrix specific MDL and QL shall be calculated as follows:

Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in attachment A.

Report single analytical values between the agency-required detection and quantitation levels with qualifier code of j following the value.

To calculate the average value (monthly average):

- Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
- For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.
- For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix specific MDL and a QL to Ecology with appropriate laboratory documentation.

### C. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

The mixing zone dimensional boundary shall be variable as defined by the effluent plume where the percent effluent is equivalent to that calculated from the maximum dilution factor. The dilution factor will be derived based on the maximum fraction of the river flow authorized for acute (2.5%) and chronic (25%) mixing zones at the established critical conditions (seasonal 7Q20). At no time shall the mixing zone cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the water body, result in damage to the ecosystem, or adversely affect public health.

The calculated dilution factors at critical conditions are as follows:

<b>Dilution Factors</b> (% effluent = 100 x 1/dil. factor)	Low River Flow Period (July – October)		High River Flow Period (November – June)	
	Acute	Chronic	Acute	Chronic
Aquatic Life	1.17 (85%)	3.96 (25%)	1.23 (81%)	6.40 (16%)
Human Health, Carcinogen	12.75 (8%, annually based)			
Human Health, Non-carcinogen	5.19 (19%, annually based)			

## S2. MONITORING REQUIREMENTS

### A. Monitoring Schedule

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
Flow, avg., & max	MGD	Raw Sewage	Continuous <sup>2</sup>	Metered
		Final Effluent	Continuous <sup>2</sup>	Metered
pH, min. & max.	s.u.	Raw Sewage	Continuous <sup>2</sup>	Metered
		Final Effluent	Continuous <sup>2</sup>	Metered
Temp	°C	Raw Sewage	Daily	Grab
		Final Effluent	Daily	Grab
		Receiving water upstream of outfall and downstream of mixing zone	Continuous June through September	Metered

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
BOD <sub>5</sub> <sup>1</sup> monthly avg., weekly avg., in years 1 to 4 of permit. In fifth year of permit see note 7	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
CBOD <sub>5</sub> <sup>1</sup> monthly avg., weekly avg., in year 5 of permit, see note 7	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
TSS	mg/L, lbs/day, % removal	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
Dissolved Oxygen	mg/L	Final Effluent	Daily	Grab
Total Residual Chlorine <sup>3</sup>	µg/L, lbs/day	Final Effluent	2/day	Grab
Chlorine Usage	lbs/day	---	Daily	Report
Fecal Coliform	c.f.u./100 mL	Final Effluent	3/week	Grab
Total Nitrogen (TN as N)	mg/L	Raw Sewage Final Effluent	1/week 1/week	24 hour Comp. 24 hour Comp.
Nitrate + Nitrite (NO <sub>3</sub> +NO <sub>2</sub> as N)	mg/L	Raw Sewage Final Effluent	1/week 1/week	24 hour Comp. 24 hour Comp.
Total Ammonia (NH <sub>3</sub> as N), monthly avg., daily max., in years 1 to 4 of permit. In fifth year of permit see notes 7 & 9	mg/L, lbs/day	Raw Sewage Final Effluent	3/week Daily	24 hour Comp. 24 hour Comp.
Alkalinity, (total as CaCO <sub>3</sub> )	mg/L	Final Effluent	3/week	Grab
Total Phosphorus (as P) monthly average and daily max. in years 1 to 4 of permit. In fifth year of permit see notes 7 & 9	ug/l, lbs/day	Raw Sewage Final Effluent	Daily Daily	24 hour Comp. 24 hour Comp.
Total Reactive Phosphorus	ug/L	Final Effluent	Daily	24 hour Comp.



MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
Aluminum (Total Recoverable)	µg/L	Raw Sewage Final Effluent	1/2 weeks when using Alum	24 hour Comp.
Arsenic (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Cadmium (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Copper (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Lead (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Zinc (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/2 weeks	24 hour Comp.
Mercury (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/month	24 hour Comp.
Silver (Total Recoverable) <sup>4</sup>	µg/L	Raw Sewage Final Effluent	1/month	24 hour Comp.
Total PCBs <sup>5 &amp; 6</sup>	ng/L	Raw Sewage 2 collection system locations	Once each in July, & once each month for Nov. thru May	24 hour Comp.
Total PCBs <sup>5 &amp; 6</sup>	pg/L	Final Effluent	1/quarter	24 hour Comp.
Total PCBs <sup>5 &amp; 6</sup>	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
2,3,7,8, TCDDs <sup>6</sup>	ng/L	Raw Sewage 2 collection system locations	Once in July, & monthly Nov. thru May	24 hour Comp.
2,3,7,8, TCDDs <sup>6</sup>	pg/L	Final Effluent	1/quarter	24 hour Comp.
2,3,7,8, TCDDs <sup>6</sup>	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
PBDE <sup>6 &amp; 10</sup> (polybrominated diphenyl ethers)	ng/L pg/L	Raw Sewage Final Effluent	1/quarter	24 hour Comp.
PBDE <sup>6 &amp; 10</sup> (polybrominated diphenyl ethers)	ng/kg	Biosolids	2/year (winter & summer)	Man. Composite
Priority Pollutants <sup>4&amp;5</sup>	SEE SPECIAL CONDITION S6.B			
Biomonitoring	SEE SPECIAL CONDITIONS S10 and S11			

MAIN PLANT DISCHARGE AT OUTFALL 005A				
PARAMETER	UNITS	SAMPLE POINT	SAMPLING FREQUENCY	SAMPLE TYPE
CSO Monitoring		SEE SPECIAL CONDITION S12.E.3		

<sup>1</sup> Beginning in the fourth year of the permit, the Permittee shall begin monitoring for BOD<sub>5</sub> and CBOD<sub>5</sub> to establish a correlation of BOD<sub>5</sub> to CBOD<sub>5</sub>

<sup>2</sup> Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken by hourly grab samples when continuous monitoring is not possible.

<sup>3</sup> Total Residual Chlorine analyses must use the spectrophotometric DPD method. Lbs reported will express the weight of chlorine added to the effluent.

<sup>4</sup> For metals see Appendix A for the required detection limit (DL) or quantitation limit (QL).

<sup>5</sup> For PCBs use EPA method 1668 with a reporting limit or quantitation limit of 10 pg/L per congener. For influent monitoring and source tracing a higher limit can be proposed to Ecology in the QAPP if the higher reporting limit still provides adequate source tracing and identification.

<sup>6</sup> See permit section S12.

<sup>7</sup> Beginning March 1, 2018; for the 3 parameters (CBOD<sub>5</sub>, NH<sub>3</sub> and TP) with WLAs established by the Spokane River and Lake Spokane DO TMDL, the monthly discharge monitoring report must provide the following information for the “ten year assessment” monitoring and future compliance projections: monthly average, daily maximum, running total for the “season,” running average for the “season,” projected trend of total lbs. and average concentration and average daily lbs. for remainder of the “season” with future compliance target indicated. If the trend projection indicates a significant potential for noncompliance with the allowable mass limitations to be in effect once the period of formal compliance begins in 2021, the Permittee is to communicate the anticipated result of the projection to the Department with appropriate recommendations to correct any trend potentially resulting in noncompliance.

<sup>8</sup> The reporting limit for Total Ammonia (as N) is 50 ug/L, the analytical protocol is listed in Appendix A of this permit.

<sup>9</sup> The reporting limit for Total Phosphorus is 5 ug/L, the analytical protocol is listed in Appendix A of this permit.

<sup>10</sup> For PBDEs use draft EPA method 1614 with a reporting limit or quantitation limit of 10 pg/L per congener. For influent monitoring and source tracing a higher limit can be proposed to Ecology in the QAPP if the higher reporting limit still provides adequate source tracing and identification.

Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in appendix A of this permit.

Report single analytical values between the agency-required detection and quantitation levels with qualifier code of j following the value.

To calculate the average value (monthly average):

- Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
- For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.
- For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix specific MDL and a QL to Ecology with appropriate laboratory documentation.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

### **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

#### **A. Reporting**

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within sixty (60) days after the sample date. The report(s) shall be sent to the Department of Ecology, Eastern Regional Office, 4601 North Monroe, Suite 202, Spokane, Washington 99205-1295.

In addition to the monthly report, a monthly summary report form (EPA No. 3320-1) shall be received no later than the 15th day of the following month.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

#### **B. Records Retention**

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

#### **C. Recording of Results**

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the

analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within (30) days after becoming aware of the violation.
2. Immediately notify the Department of the failure to comply.
3. Within 24 hours from the time the Permittee becomes aware of any of the following circumstances, the Permittee must report the noncompliance due to the following circumstances by telephone (and email) to Ecology at 509-329-3400:
  - a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
  - b. Any unanticipated bypass that exceeds any effluent limit in the permit (See Part S4.B, "Bypass Procedures").
  - c. Any upset that exceeds any effluent limit in the permit (See G.15, "Upset").
  - d. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1 of this permit.
  - e. Any unpermitted overflow prior to the treatment works, whether or not such unpermitted overflow endangers health or the environment or exceeds any effluent limit in the permit. This includes overflows such as from manholes and side sewer laterals due to blockages.
4. Submit a detailed written report to the Department within thirty (30) days (five [5] days for upsets and bypasses listed above in 1 and 2), unless requested earlier by the Department. The report shall contain:
  - a. a description of the noncompliance and its cause;
  - b. the period of noncompliance, including exact dates and times;
  - c. the estimated time noncompliance is expected to continue if it has not been corrected;

- d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
- e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in paragraph E.3, above.

F. Maintaining a Copy of This Permit

A copy of this permit must be kept at the treatment plant and be made available upon request to the public or Ecology inspectors.

#### S4. FACILITY LOADING

A. Design Criteria

The flows and waste loadings from approved engineering report for the Spokane Riverside Park Water Reclamation Facility (design year 2015) are shown below. The approved influent flows and loading (also known as the design criteria) shall not be exceeded:

Parameter	Dry Season (May through October)	Wet Season (Nov. through April)
Average flow, MGD	55.9	60.6
Maximum Monthly flow, MGD	59.6	79.8
Maximum Day flow, MGD	103.9	129.5
Peak Hour flow, MGD <sup>(1)</sup>	130	130
BOD <sub>5</sub> influent loading, lb./day		
Annual Average	85,100	
Maximum Month	102,120	
Maximum Day	170,200	
TSS influent loading, lb./day		
Annual Average	85,100	
Maximum Month	102,120	
Maximum Day	170,200	
TKN influent loading, lb./day		
Annual Average	16,300	
Maximum Month	19,560	
Maximum Day	32,600	

TP influent loading, lb./day

Annual Average	2,270
Maximum Month	2,570
Maximum Day	3,630

(1) The capacity of the primary and secondary clarifiers and primary influent piping treatment processes is 100 MGD with four clarifiers in service. The hydraulic capacity of the influent interceptors is 130 MGD. Plans are in development that may result in a peak hydraulic capacity of 150 MGD.

**B. Plans for Maintaining Adequate Capacity**

The permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
2. When the projected increase would reach design capacity within five years, whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.
  - a. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
  - b. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
  - c. Limitation on future sewer extensions or connections or additional waste loads.
  - d. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
  - e. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment

D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3) would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)]. .

E. Waste load Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by **July 1, 2011** and annually thereafter. The report shall contain the following:

An indication of compliance or noncompliance with the permit effluent limitations, for TP this assessment shall include a calculation of the coefficient of variation for the season April 1 through October 31;

The report shall provide a statistical analysis of the facility's performance removing total phosphorus, BOD<sub>5</sub>, CBOD<sub>5</sub> and ammonia on a monthly average basis, 30 day rolling average basis, seasonal average basis, and seasonal median basis.

A comparison between:

- the existing and design monthly average dry weather flows,
- the existing and design monthly average wet weather flows
- the existing and design peak flows,
- the existing and design BOD<sub>5</sub>, mass loading;
- the existing and design total suspended solids loadings, mass loading;
- the existing and design total phosphorus, mass loading and influent concentration;
- the existing and design total ammonia, mass loading and influent concentration.

Also, the percentage increase in the above parameters since the last annual report.

The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above.



The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

## **S5. OPERATION AND MAINTENANCE**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

### **A. Certified Operator**

An operator certified for at least a Class IV plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class III plant shall be in charge during all regularly scheduled shifts.

### **B. O & M Program**

The Permittee shall institute an adequate operation and maintenance program for the entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

### **C. Short-term Reduction**

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of its obligations under this permit.

### **D. Electrical Power Failure**

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate all vital

components and critical lighting and ventilation during peak wastewater flow conditions, except vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but shall be sufficient to maintain the biota.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

This permit prohibits a bypass, which is the intentional diversion of waste streams from any portion of a treatment facility. The Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
- c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

#### G. Operations and Maintenance Manual

The approved Operations and Maintenance Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual.

An Operations and Maintenance (O&M) Manual update shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Department for approval **by December 1, 2014** and annually thereafter as additional upgrades and improvements are made. The Permittee shall confirm this review by letter to the Department. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual.

In addition to requirements of WAC 173-240-080 (1) through (5) the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of process wastewater
3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (e.g. defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
4. Safety provisions through design feature and safety procedures provided by operational considerations and periodic training classes. This includes fail safe features for sludge digestion facilities, chlorination facilities, and other chemical storage and handling facilities.
5. The treatment plant process control monitoring schedule and control systems.

## **S6. PRETREATMENT (CITY OF SPOKANE)**

### **A. General Requirements**

1. The Permittee (City of Spokane) shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal entitled "Industrial Pretreatment Program" dated September 30, 1987; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR Part 403). The Ordinance section containing the local limits was last updated March 31, 2003.

A meeting was held on October 20, 2004 at the Department of Ecology Eastern Regional Office on the subject of Spokane-area pretreatment. The Department of Ecology, City of Spokane, Spokane County, and the City of Spokane Valley agreed that the City of Spokane has the authority to administer its delegated Pretreatment program to their present and future sewer customers located within their designated sewer service areas in City of Spokane Valley, in Spokane County, and in the City of Spokane. For the purpose of this permit and pretreatment program delegation, this applies to the present and future sewer customers who contribute wastewater into the City of Spokane sewer collection system and are located either within or outside of the corporate limits of the City of Spokane. This applies to Brenntag Pacific in the City of Spokane Valley, and Johanna Beverages, Reliance Trailer, and Goodrich in the West Plains Area of Spokane County no later than July 31, 2013. The City acknowledges that as owner and operator of a wastewater collection system and POTW it is their responsibility to protect their infrastructure, and accepts the obligations of a Delegated Pretreatment Program.

Both the City of Spokane and Spokane County, as the control authority for their Delegated Pretreatment Programs, will continue to enforce and update, if necessary and appropriate, their interlocal agreements and/or multijurisdictional pretreatment agreement with “contributing” jurisdictions such as Millwood, Liberty Lake, and Airway Heights. Some of these actions may include conducting Industrial User Surveys, monitoring, and permitting commercial and/or industrial users.

At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:

- a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited discharge standards as set forth in 40 CFR 403.5, local limitations specified in Section 13.03.0416 of Chapter 13.03 of the Spokane Municipal Code, or state standards, which ever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.
- b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(v)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits shall contain as a minimum, all the requirements of 40 CFR 403.8 (f)(1)(iii). The Permittee shall coordinate the permitting process with the Department regarding any industrial facility, which may possess a state waste discharge permit issued by the Department. Once issued, an industrial waste discharge permit will take precedence over a state-issued waste discharge permit.
- c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. Records shall be maintained for at least a three-year period.

- d. Perform inspections, surveillance, and monitoring activities on industrial users to determine and/or confirm compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs shall be conducted annually. Frequency of regular local monitoring of SIU wastewaters shall normally be commensurate with the character and volume of the wastewater but shall not be less than once per year. Sample collection and analysis shall be performed in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.
- e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee shall take timely and appropriate enforcement action to address the noncompliance. The Permittee's action shall follow its enforcement response procedures and any amendments, thereof.
- f. Publish, at least annually in a newspaper of general circulation in the Permittee's service area, a list of all nondomestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(viii) through 40 CFR 403.8(f)(2)(viii)(H).
- g. If the Permittee elects to conduct sampling of an SIU's discharge in lieu of requiring user self-monitoring, it must satisfy all requirements of 40 CFR Part 403.12. This includes monitoring and record keeping requirements of Sections 403.12(g) and (o). For SIUs subject to categorical standards (CIUs), the Permittee may either complete baseline and initial compliance reports for the CIU (when required by 403.12(b) and (d)) or require these of the CIU. The Permittee must ensure that it provides SIUs the results of sampling in a timely manner, inform SIUs of their right to sample, their obligations to report any sampling they do, to respond to non-compliance, and to submit other notifications. These include a slug load report (403.12(f)), notice of changed discharge (403.12(j)), and hazardous waste notifications (403.12(p)). If sampling for the SIU, the Permittee must not sample less than once in every six-month period unless the Permittee's approved program includes procedures for reduction of monitoring for Middle-Tier or Non-Significant Categorical Users per 403.12(e)(2) and (3) and those procedures have been followed.
- h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.
- i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.
- a. Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These agreements must identify the agency responsible to perform the various implementation and enforcement activities in the contributing jurisdiction. In addition, the Permittee must develop Multi-Jurisdictional Agreements that outlines the specific roles, responsibilities, and pretreatment activities of each jurisdiction.

2. The Permittee shall review, change if necessary, and submit to the Department for approval by **October 1, 2014**; an updated Accidental Spill Prevention Program. The program, as approved by the Department, shall include a schedule for implementation, and shall become an enforceable part of these permit conditions.
3. The Permittee must evaluate any new designated Significant Industrial User within one year of designation for a plan or other action to control Slug Discharges and also in accordance with 40 CFR 403.8(f)(1)(iii)(B)(6), 40 CFR 403.8(f)(2)(vi) and 40 CFR 403.8(f)(2)(vi)(A)-(D).
4. The Permittee must evaluate at a minimum whether or not each Significant Industrial User needs a plan to control slug discharges. For purposes of this section, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. The Permittee must make the results of this evaluation available to Ecology upon request. If the Permittee decides that a slug control plan is needed, the plan must contain, at a minimum, the following elements:
  - a. Description of discharge practices, including non-routine batch discharges.
  - b. Description of stored chemicals.
  - c. Procedures for immediately notifying the Permittee of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days.
  - d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.
5. Pretreatment Report

Each Pretreatment Program Permittee shall provide to the Department an annual report that briefly describes its program activities during the previous calendar year. This report shall be submitted no later than March 31 of each year to:

Washington Department of Ecology,  
Eastern Regional Office,  
4601 North Monroe Street,  
Spokane, WA 99205-1295.

The report shall include the requirements listed in 40 CFR 403.12(h)(i)(1)-(5) and the following additional information:

- a. An updated nondomestic inventory (Industrial User Survey).
- b. Results of wastewater sampling at the treatment plant as specified in **S6.B**. The Permittee shall calculate removal rates for each pollutant and evaluate the

adequacy of the existing local limitations in Section 13.03.0416 of Ordinance 13.03 in prevention of treatment plant interference, pass through of pollutants that could affect receiving water quality, and sludge contamination.

c. Status of program implementation, including:

- (1) Any substantial modifications to the pretreatment program as originally approved by the Department, including staffing and funding levels.
- (2) Any interference, upset, or permit violations experienced at the POTW that are directly attributable to wastes from industrial users.
- (3) Listing of industrial users inspected and/or monitored, and a summary of the results.
- (4) Listing of industrial users scheduled for inspection and/or monitoring for the next year, and expected frequencies.
- (5) Listing of industrial users notified of promulgated pretreatment standards and/or local standards. Indicate which industrial users are on compliance schedules and the final date of compliance for each.
- (6) Listing of industrial users issued industrial waste discharge permits.
- (7) Planned changes in the pretreatment program implementation plan. (See subsection S6.A.6. below.)

d. Status of compliance activities, including:

- (1) Listing of industrial users that failed to submit baseline monitoring reports or any other reports required under 40 CFR 403.12 and in the Permittee's current Industrial Pretreatment program Enforcement Response Plan and Industrial Sampling and Monitoring Guidance Manual.
- (2) Listing of industrial users that were at any time during the reporting period not complying with federal, state, or local pretreatment standards or with applicable compliance schedules for achieving those standards, and the duration of such noncompliance.
- (3) Summary of enforcement activities and other corrective actions taken or planned against noncomplying industrial users. The Permittee shall supply to the Department a copy of the public notice of facilities that were in significant noncompliance.

e. Local Limits updates and any other updates specified in S6.C and S6.D.

B. Monitoring Requirements

The Permittee must:



1. Monitor its influent, effluent, and sludge for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended, any compounds identified because of Condition S6.B.4, and any other pollutants expected from non-domestic sources using U.S. EPA-approved procedures for collection, preservation, storage, and analysis. Section S2 (Monitoring Requirements) in a few instances requires a more sensitive quantitation or reporting limit than appendix A. When required the requirements of S2 are to control monitoring and reporting requirements.
2. Test influent, effluent, and sludge samples for the priority pollutant metals (Table III, 40 CFR 122, Appendix D) on a quarterly basis throughout the term of this permit.
3. Test influent, effluent, and sludge samples for the organic priority pollutants (Table II, 40 CFR 122, Appendix D) on an annual basis. The Permittee may use the data collected for application purposes using Appendix A test methods to meet this requirement.
4. Sample POTW influent and effluent on a day when industrial discharges are occurring at normal-to-maximum levels.
5. Obtain 24-hour composite samples for the analysis of acid and base/neutral extractable compounds and metals.
6. Collect grab samples at equal intervals for a total of four grab samples per day for the analysis of volatile organic compounds. The laboratory may run a single analysis for volatile pollutants (Method 624) for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1 ml of each grab included in the composite.
7. Ensure that all reported test data for metals represents the total amount of the constituents present in all phases, whether solid, suspended, or dissolved elemental or combined, including all oxidation states unless otherwise indicated.
8. Handle, prepare, and analyze all wastewater samples taken for GC/MS analysis in accordance with the U.S. EPA Methods 624 and 625 (October 26, 1984).
9. Collect a sludge sample concurrently with a wastewater sample as a single grab of residual sludge. Sludge organic priority pollutant sampling and analysis must conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and Ecology has approved. Sludge metals priority pollutant sampling and analysis must conform to U.S. EPA SW 846 6000/7000 Series Methods unless the Permittee requests an alternate method and Ecology has approved.
10. Collect grab samples for cyanide, phenols, and oils. Measure hexane soluble oils (or equivalent) only in the influent and effluent.
11. Make a reasonable attempt to identify all other substances and quantify all pollutants shown to be present by gas chromatograph/mass spectrometer (GC/MS) analysis per 40 CFR 136, Appendix A, Methods 624 and 625, in addition to

quantifying pH, oil and grease, and all priority pollutants.

The Permittee should attempt to make determinations of pollutants for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). The Permittee should attempt to make determinations from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. The Permittee may express results for non-substituted aliphatic compounds as total hydrocarbon content.

12. Use a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst.
13. Conduct additional sampling and appropriate testing to determine concentration and variability, and to evaluate trends for all detected substances determined to be pollutants.

C. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Pretreatment Report.

D. Local Limit Update

By **October 15, 2012**, the Permittee shall, in consultation with the Department, reevaluate and update their local limits in order to prevent pass through or interference. The Permittee should refer to EPA's Local Limits Development Guidance dated July 2004. The Permittee should also consider Total Toxic Organics, Phosphorus, metals, and conventional pollutants in their revised local limits. Upon determination by the Department that any pollutant present causes pass through or interference, or exceeds established sludge standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

E. Mercury Control Plan

The Permittee shall revise and submit to the Department of Ecology an updated Mercury abatement and control plan. The plan shall be expanded as the Department of Ecology develops and releases further guidance. The Mercury Control Plan shall be submitted to the Department of Ecology by **February 1, 2016**.

Mercury Plan development guidance can be found at the following locations:

Ecology mercury web site <http://www.ecy.wa.gov/mercury/>

For Dental Plan guidance <http://www.ecy.wa.gov/dentalbmps/index.html>

Reduction plan guidance <http://www.ecy.wa.gov/biblio/0303001.html>

## **S7. PRETREATMENT (SPOKANE COUNTY)**

### **A. General Requirements**

1. The Permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal entitled "Industrial Pretreatment Program" and updated on February 5, 2001; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR Part 403). The Ordinance section containing the local limits was last updated October 1, 2009.

A meeting was held on October 20, 2004 at the Department of Ecology Eastern Regional Office on the subject of Spokane-area pretreatment. The Department of Ecology, City of Spokane, Spokane County, and the City of Spokane Valley agreed that Spokane County has the authority to administer its Delegated Pretreatment Program to their present and future sewer customers located within their designated sewer service areas in Spokane County and in the City of Spokane Valley. For the purpose of this permit and pretreatment program delegation, this applies to customers who contribute wastewater into the Spokane County sewer collection system and are located outside of the corporate limits of the City of Spokane and within the City of Spokane Valley and Spokane County. Existing permitted facilities that this applies to, Ecolite, Galaxy Compound Semiconductors, Lloyd Industries, Honeywell, Kemira Water Solutions, American On-Site Services and Novation in the City of Spokane Valley, and the Mica Landfill in Spokane County. The County acknowledges that as owner and operator of a wastewater collection system it is their responsibility to protect their infrastructure, and by agreement the infrastructure of the downstream POTW, and accepts the obligations of a Delegated Pretreatment Program.

Both the City of Spokane and Spokane County, as the control authority for their Delegated Pretreatment Programs, will continue to enforce and update, if necessary and appropriate, their interlocal agreements and/or multijurisdictional pretreatment agreement with "contributing" jurisdictions such as Millwood, the City of Spokane Valley and the City of Spokane. Some of these actions will include conducting Industrial User Surveys, monitoring, and permitting commercial and/or industrial users.

At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:

- a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited

discharge standards as set forth in 40 CFR 403.5, local limitations specified in Section 08.03A.0204 of Ordinance 8.03A, or state standards, which ever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.

- b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(v)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits shall contain as a minimum, all the requirements of 40 CFR 403.8 (f)(1)(iii). The Permittee shall coordinate the permitting process with the Department regarding any industrial facility, which may possess a state waste discharge permit issued by the Department. Once issued, an industrial waste discharge permit will take precedence over a state-issued waste discharge permit.
- c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. Records shall be maintained for at least a three-year period.
- d. Perform inspections, surveillance, and monitoring activities on industrial users to determine and/or confirm compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs shall be conducted annually. Frequency of regular local monitoring of SIU wastewaters shall normally be commensurate with the character and volume of the wastewater but shall not be less than once per year. Sample collection and analysis shall be performed in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.
- e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee shall take timely and appropriate enforcement action to address the noncompliance. The Permittee's action shall follow its enforcement response procedures and any amendments, thereof.
- f. Publish, at least annually in a newspaper of general circulation in the Permittee's service area, a list of all nondomestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(viii) through 40 CFR 403.8(f)(2)(viii)(H).
- g. If the Permittee elects to conduct sampling of an SIU's discharge in lieu of requiring user self-monitoring, it must satisfy all requirements of 40 CFR Part 403.12. This includes monitoring and record keeping requirements of Sections 403.12(g) and (o). For SIUs subject to categorical standards (CIUs), the Permittee may either complete baseline and initial compliance reports for the CIU (when required by 403.12(b) and (d)) or require these of the CIU. The Permittee must ensure that it provides SIUs the results of sampling in a timely manner, inform SIUs of their right to sample, their obligations to report any

sampling they do, to respond to non-compliance, and to submit other notifications. These include a slug load report (403.12(f)), notice of changed discharge (403.12(j)), and hazardous waste notifications (403.12(p)). If sampling for the SIU, the Permittee must not sample less than once in every six-month period unless the Permittee's approved program includes procedures for reduction of monitoring for Middle-Tier or Non-Significant Categorical Users per 403.12(e)(2) and (3) and those procedures have been followed.

- h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.
  - i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.
  - j. Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These agreements must identify the agency responsible to perform the various implementation and enforcement activities in the contributing jurisdiction. In addition, the Permittee must develop Multi-Jurisdictional Agreements that outlines the specific roles, responsibilities, and pretreatment activities of each jurisdiction.
- 2. The Permittee shall review, change if necessary, and submit to the Department for approval by **October 1, 2014**; an updated Accidental Spill Prevention Program. The program, as approved by the Department, shall include a schedule for implementation, and shall become an enforceable part of these permit conditions.
- 3. The Permittee must evaluate any new designated Significant Industrial User within one year of designation for a plan or other action to control Slug Discharges and also in accordance with 40 CFR 403.8(f)(1)(iii)(B)(6), 40 CFR 403.8(f)(2)(vi) and 40 CFR 403.8(f)(2)(vi)(A)-(D).
- 4. The Permittee must evaluate at a minimum whether or not each Significant Industrial User needs a plan to control slug discharges. For purposes of this section, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. The Permittee must make the results of this evaluation available to Ecology upon request. If the Permittee decides that a slug control plan is needed, the plan must contain, at a minimum, the following elements:
  - a. Description of discharge practices, including non-routine batch discharges.
  - b. Description of stored chemicals.
  - c. Procedures for immediately notifying the Permittee of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days.
  - d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker

training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.

## 5. Pretreatment Report

Each Pretreatment Program Permittee shall provide to the Department an annual report that briefly describes its program activities during the previous calendar year. This report shall be submitted no later than May 1 of each year to:

Washington Department of Ecology,  
Eastern Regional Office,  
4601 North Monroe Street,  
Spokane, WA 99205-1295.

The report shall include the requirements listed in 40 CFR 403.12(h)(i)(1)-(5) and the following additional information:

- a. An updated nondomestic inventory (Industrial User Survey).
- b. Results of wastewater sampling at the treatment plant as specified in **S7.B**. The Permittee shall calculate removal rates for each pollutant and evaluate the adequacy of the existing local limitations in Section 8.03A.0204 of Ordinance 08.03A in prevention of treatment plant interference, pass through of pollutants that could affect receiving water quality, and sludge contamination.
- c. Status of program implementation, including:
  - (1) Any substantial modifications to the pretreatment program as originally approved by the Department, including staffing and funding levels.
  - (2) Any interference, upset, or permit violations experienced at the POTW that are directly attributable to wastes from industrial users.
  - (3) Listing of industrial users inspected and/or monitored, and a summary of the results.
  - (4) Listing of industrial users scheduled for inspection and/or monitoring for the next year, and expected frequencies.
  - (5) Listing of industrial users notified of promulgated pretreatment standards and/or local standards. Indicate which industrial users are on compliance schedules and the final date of compliance for each.
  - (6) Listing of industrial users issued industrial waste discharge permits.
  - (7) Planned changes in the pretreatment program implementation plan. (See subsection S7.A.6. below.)

d. Status of compliance activities, including:

- (1) Listing of industrial users that failed to submit baseline monitoring reports or any other reports required under 40 CFR 403.12 and in accordance with the Permittee's current pretreatment program.
- (2) Listing of industrial users that were at any time during the reporting period not complying with federal, state, or local pretreatment standards or with applicable compliance schedules for achieving those standards, and the duration of such noncompliance.
- (3) Summary of enforcement activities and other corrective actions taken or planned against noncomplying industrial users. The Permittee shall supply to the Department a copy of the public notice of facilities that were in significant noncompliance.

e. Local Limits updates and any updates specified in S7.C and S7.D.

B. Monitoring Requirements

The Permittee must:

1. Monitor its influent, effluent, and sludge for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended, any compounds identified because of Condition S6.B.4, and any other pollutants expected from non-domestic sources using U.S. EPA-approved procedures for collection, preservation, storage, and analysis. Section S2 (Monitoring Requirements) in a few instances requires a more sensitive quantitation or reporting limit than appendix A. When required the requirements of S2 are to control monitoring and reporting requirements.
2. Test influent, effluent, and sludge samples for the priority pollutant metals (Table III, 40 CFR 122, Appendix D) on a quarterly basis throughout the term of this permit.
3. Test influent, effluent, and sludge samples for the organic priority pollutants (Table II, 40 CFR 122, Appendix D) on an annual basis. The Permittee may use the data collected for application purposes using Appendix A test methods to meet this requirement.
4. Sample POTW influent and effluent on a day when industrial discharges are occurring at normal-to-maximum levels.
5. Obtain 24-hour composite samples for the analysis of acid and base/neutral extractable compounds and metals.
6. Collect grab samples at equal intervals for a total of four grab samples per day for the analysis of volatile organic compounds. The laboratory may run a single analysis for volatile pollutants (Method 624) for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1 ml of each grab included in the composite.

7. Ensure that all reported test data for metals represents the total amount of the constituents present in all phases, whether solid, suspended, or dissolved elemental or combined, including all oxidation states unless otherwise indicated.
8. Handle, prepare, and analyze all wastewater samples taken for GC/MS analysis in accordance with the U.S. EPA Methods 624 and 625 (October 26, 1984).
9. Collect a sludge sample concurrently with a wastewater sample as a single grab of residual sludge. Sludge organic priority pollutant sampling and analysis must conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and Ecology has approved. Sludge metals priority pollutant sampling and analysis must conform to U.S. EPA SW 846 6000/7000 Series Methods unless the Permittee requests an alternate method and Ecology has approved.
10. Collect grab samples for cyanide, phenols, and oils. Measure hexane soluble oils (or equivalent) only in the influent and effluent.
11. Make a reasonable attempt to identify all other substances and quantify all pollutants shown to be present by gas chromatograph/mass spectrometer (GC/MS) analysis per 40 CFR 136, Appendix A, Methods 624 and 625, in addition to quantifying pH, oil and grease, and all priority pollutants.

The Permittee should attempt to make determinations of pollutants for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). The Permittee should attempt to make determinations from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. The Permittee may express results for non-substituted aliphatic compounds as total hydrocarbon content.

12. Use a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst.
13. Conduct additional sampling and appropriate testing to determine concentration and variability, and to evaluate trends for all detected substances determined to be pollutants.

#### C. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Pretreatment Report.

#### D. Local Limit Update

By **August 15, 2012**, the Permittee shall, in consultation with the Department, reevaluate and update their local limits in order to prevent pass through or interference. The permittee should refer to EPA's Local Limits Development Guidance dated July 2004. The permittee should also consider Total Toxic Organics, Phosphorus, metals, and conventional pollutants in their revise local limits. Upon determination by the



Department that any pollutant present causes pass through or interference, or exceeds established sludge standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

E. Mercury Abatement and Control Plan

The Permittee shall revise and submit to the Department of Ecology an updated Mercury Abatement and Control Plan. The plan shall be expanded as the Department of Ecology develops and releases further guidance. The Mercury Control Plan shall be submitted to the Department of Ecology by **February 15, 2016**.

Mercury Plan development guidance can be found at the following locations:

Ecology mercury web site	<a href="http://www.ecy.wa.gov/mercury/">http://www.ecy.wa.gov/mercury/</a>
For Dental Plan guidance	<a href="http://www.ecy.wa.gov/dentalbmeps/index.html">http://www.ecy.wa.gov/dentalbmeps/index.html</a>
Reduction plan guidance	<a href="http://www.ecy.wa.gov/biblio/0303001.html">http://www.ecy.wa.gov/biblio/0303001.html</a>

**S8. RESIDUAL SOLIDS**

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

**S9. SPILL PLAN**

The Permittee shall by October 1, 2014 submit to the Department an update to the existing Spill Control Plan. The Permittee shall review the plan at least annually and update as needed. Changes to the plan shall be sent to the Department. The Plan and any supplements shall be followed throughout the term of the permit.

The updated Spill Control Plan shall include the following:

- A description of operator training to implement the Plan.
- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

- A list of all oil and petroleum products, materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or other materials which may become pollutants or cause pollution upon reaching state's waters.
- Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.

## **S10. ACUTE TOXICITY**

### **A. Effluent Testing Requirements**

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. The two species listed below shall be used on each sample and the results submitted to the Department as a part of the permit renewal application process. The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).
2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012).

### **B. Sampling and Reporting Requirements**

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test in order to determine dose response. Whenever a dilution series is used, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

## **S11. CHRONIC TOXICITY**

### **A. Effluent Testing Requirements**

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All of the chronic toxicity tests listed below shall be conducted on each sample. The results of this chronic toxicity testing shall be submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. This series of dilutions shall include the acute critical effluent concentration (ACEC). The ACEC equals 85% effluent. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	<i>Pimephales promelas</i>	EPA/600/4-91/002
Water flea	<i>Ceriodaphnia dubia</i>	EPA/600/4-91/002
Alga	<i>Selenastrum capricornutum</i>	EPA/600/4-91/002

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples or grab samples. Samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

## **S12. RECEIVING WATER AND EFFLUENT STUDY**

### **A. General Requirements**

The Permittee shall conduct analyses of the receiving water and the wastewater facility's influent and effluent samples as listed in permit section S2 and collected in accordance with protocols, monitoring requirements and QA/QC procedures specified in this section.

Raw sewage from the collection system and headworks and effluent samples must be analyzed for:

1. PCBs, 2,3,7,8 TCDDs and PBDE at the locations and at the minimum frequencies listed in the schedule in S2.
2. A report of the results with attached laboratory data sheets shall be submitted to Ecology (ERO Water Quality Program permit manager and the urban waters staff) annually. After each year of sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the permittee and Ecology (ERO Water Quality Program permit manager and the urban waters staff) will review the data, including pattern analysis of homologs, detection limits, QA/QC procedures and a draft action plan (The Toxics Management Plan) listing identified sources, potential sources suggested by data analysis and future source identification activities. Annually the permittee and Ecology will confer and revise the locations and frequency of the raw sewage sampling in the collection system for these pollutants.

The Toxics Management Plan must address source control and elimination of PCBs from:

Contaminated soils and sediments,  
Storm water entering the wastewater collection system,  
Industrial and commercial sources,

As an element of the pretreatment program, the City and County will expand the scope of their inspections and monitoring to include PCBs and other toxics as appropriate. Monitoring should follow the QAPP the RPWRF lab is developing.

By means of eliminating active sources such as,

Older mechanical machinery  
Older electrical equipment and components,  
Construction material content such as paints and caulking,  
Commercial materials such as ink and dyes,

By means of changing city procurement practices and ordinances control and minimize toxics, including preferential use of PCB free substitutes for those products containing PCBs below the regulated level of 5 ppm, in sources such as:

Construction material content such as paints and caulking  
Commercial materials such as ink and dyes,  
Soaps and cleaners,

The City (individually or in collaboration with other dischargers) must also prepare public media educating the public about the difference between products free of PCBs and those labeled non-PCB but which contain PCBs below the TOSCA regulatory threshold of 5 ppm.

The effluent monitoring results shall be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

The goals of the Toxics Management Plan are:

- to reduce toxicant loadings, including PCBs, to the Spokane River to the maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants to the Riverside Park Water Reclamation Facility over the next 10 years.
- Reduce PCBs in the effluent to the maximum extent practicable to bring the Spokane River into compliance with applicable water quality standards for PCBs.

3. Temperature per the schedule in S2.

#### B. Protocols

PCBs, 2,3,7,8 TCDDs and PBDE sampling and analysis shall be in accordance with the quality assurance plan and scope of work submitted to the Department of Ecology. The Permittee's quality assurance plan can use the quality assurance plan of Ecology's Urban Toxics Team for a starting point and submit the City's draft for review and approval no later than **March 15, 2012**. The quality assurance plan will be reviewed annually and revised if needed.

Temperature must be monitored using micro-recording temperature devices known as thermistors. Ecology's Quality Assurance Project Plan Development Tool (*Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends*) contains protocols for continuous temperature sampling. This document is available online at <http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6%20Ecology%20SOPs/Protocols/ContinuousTemperatureSampling.pdf>. Calibration as specified in this document is not required if the Permittee uses recording devices which are certified by the manufacturer. Ecology does not require manufacture-specific equipment as given in this document, however, if the Permittee wishes to use measuring devices from

another company the accuracy must be demonstrated to be equivalent. The recording devices must be set to record at one-half hour intervals.

The Quality Assurance Project Plan for temperature has been submitted for review and approval.

C. Quality Assurance/Quality Control Procedures

The Permittee must conduct all sampling and analysis in accordance with the guidelines given in ***Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies***, Ecology Publication 04-03-030 (<http://www.ecy.wa.gov/pubs/0403030.pdf>).

**S13. COMBINED SEWER OVERFLOWS**

A. Discharge Locations

The following is a list of combined sewer overflows (CSOs), which are occasional point sources of pollutants as a result of precipitation events. Discharges from these sites are prohibited except as a result of and during precipitation events. No authorization is given by this permit for discharge from a CSO that causes adverse impacts that threaten characteristic uses of the receiving water as identified in the Water Quality Standards, Chapter 173-201A WAC.

OUTFALL NUMBER	OVERFLOW STRUCTURE & REGULATOR LOCATION DESCRIPTION	OUTFALL LOCATION REFERENCE
<b>Spokane River Discharges (North Bank)</b>		
002	A.L. White @ Hartley (extended)	0.5 miles downstream of WWTP
006	Kiernan @ NW Blvd	0.25 miles upstream of WWTP
007	Columbia Circle @ Downriver Drive	0.4 miles upstream of WWTP
010	Cochran @ Buckeye	At Downriver Bridge
012	Nora @ Pettet Dr	0.55 miles Upstream of T.J. Meenach Bridge
014	Sherwood @ Summit	2.0 miles upstream of T.J. Meenach Bridge
015	Ohio @ Nettleton	2.5 miles upstream of T.J. Meenach Bridge
<b>Discharges to Spokane River (South Bank)</b>		
016	“A” @ Linton – Geiger	1.45 miles downstream of Monroe St Dam
<b>Discharges to Hangman Creek</b>		
019	Seventh @ Inland Empire Way	At High Bridge (East Side)
020	High Drive between 33 <sup>rd</sup> & 37 <sup>th</sup>	2.65 miles upstream of Avista Bridge
<b>Discharges to Spokane River (South Bank)</b>		

<b>OUTFALL NUMBER</b>	<b>OVERFLOW STRUCTURE &amp; REGULATOR LOCATION DESCRIPTION</b>	<b>OUTFALL LOCATION REFERENCE</b>
022	Main @ Oak	0.7 miles downstream at Monroe St. Dam
<b>Discharges to Spokane River (North Bank)</b>		
023	Cedar @ Ide	0.3 miles downstream of Monroe St. Dam
<b>Discharges to Spokane River (South Bank)</b>		
024	Cedar @ Riverside (2)	0.3 miles downstream of Monroe St. Dam
025	Cedar @ Main	0.3 miles downstream of Monroe St. Dam
026	Lincoln @ Spokane Falls Blvd	At Monroe St. Bridge
033	Fifth @ Arthur Third @ Perry Third @ Arthur First @ Arthur	0.15 miles upstream of J. Keefe Bridge
034	Crestline @ Riverside	At Trent Bridge
038	Magnolia @ S. Riverton	0.15 miles upstream of Mission
039	Altamont @ S. Riverton	0.75 miles downstream of Greene
040	Regal @ S. Riverton	0.25 miles downstream of Greene
<b>Discharge to Spokane River (North Bank)</b>		
041	Rebecca @ Upriver Dr	0.5 miles upstream of Greene
<b>Discharge to Spokane River (South Bank)</b>		
042	Surro Dr.	1.1 miles upstream of Greene St.

#### B. Combined Sewer Overflow Report

The Permittee shall submit annually a CSO Report to the Department for review and approval, which complies with the performance standards of WAC 173-245 and must include documentation of compliance with the Nine Minimum Controls for CSOs described in Section S13.C.

The performance standard will apply to all CSO outfalls which have been identified by the Permittee in the CSO Reduction Plan Amendment as meeting the “greatest reasonable reduction.” The performance standard is derived from the State regulatory requirements as specified in WAC 173-245-020(22). The performance standard for controlled CSOs is not more than one discharge event per year on average. Compliance with the performance standard will be based on a 20-year moving averaging period, including past years and the current year. When the period of data collection is less than 20 years, the averaging period will include all past years for which flow monitoring data was collected. The Permittee must report the average number of discharge events per controlled outfall per year based on a 20-year moving average to be reported in the annual report. Compliance with the performance standard is determined annually.



### C. Nine Minimum Controls

In accordance with Chapter 173-245 WAC and US EPA CSO control policy (59 FR 18688), the Permittee must implement and document the following nine minimum controls (NMC) for CSOs. Compliance with the NMC must be documented in the annual CSO Annual Report as required above.

The Permittee must comply with the following technology-based requirements. The Permittee must:

1. Implement proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The program must consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
2. Implement procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency, and duration of CSOs.
3. Review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from the discharges from nondomestic users.
4. Operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency, and duration of CSOs. The Permittee must deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.
5. Dry weather overflows from CSO outfalls are prohibited. The Permittee must report each dry weather overflow to the permitting authority as soon as it becomes aware of the overflow. When it detects a dry weather overflow, the Permittee must begin corrective action immediately and inspect the dry weather overflow each subsequent day until it has eliminated the overflow.
6. Implement measures to control solid and floatable materials in CSOs.
7. Implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
8. Implement a public notification process to inform the citizens of when and where CSOs occur. The process must include (a) mechanism to alert persons of the occurrence of CSOs and (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs.
9. Monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This must include collection of data that it will use to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which it will base the long-term control plan. This data must include:

- a) Characteristics of the combined sewer system including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS.
- b) Total number of CSO events and the frequency and duration of CSOs for a representative number of events.
- c) Locations and designated uses of receiving water bodies.
- d) Water quality data for receiving water bodies.
- e) Water quality impacts directly related to CSO (for example, beach closing, floatables, wash-up episodes, fish kills).

D. Combined Sewer Overflow Reduction Plan

The Permittee shall submit, as necessary, an amendment of its CSO Reduction Plan to the Department for review and approval. The amendment shall comply with the requirements of WAC 173-245-090(2). Annually, in October, the City shall submit a progress report of the progress made implementing the CSO Reduction Plan. The progress report shall list the status of planning, design and construction activities for each CSO. The report will include discussion of problems identified that have the delay completion of a project and how the problem(s) will or could be resolved.

E. CSO Maintenance and Inspection Plan

The Permittee shall submit annually (beginning **October 1, 2011**) for review and approval a plan for the following calendar year to maintain the operation, monitoring and function of the remaining CSOs. The plan shall include inspection protocols based on lessons learned to ensure the CSOs are functioning as intended and that public safety and protection of the environment as ensured to the best extent possible.

F. CSO Maintenance and Inspection Report

The Permittee shall submit annually (beginning **March 1, 2012**) for review a progress report covering the previous calendar year, on visual and other inspection made of all CSOs including diversion weirs manhole and other potential structural features that could result in unmonitored CSO discharges. The report shall include a listing and brief description of corrections made. Corrective actions are to include training and updated construction contract language for work of city infrastructure that could result in damage or release of water or sewage to a sewer collection system.

G. CSO Compliance Schedule

In order to achieve the greatest reasonable reduction of combined sewer overflows at the earliest possible date, the City shall implement all portions of the approved CSO reduction plan and amendments dated December 4, 1998, March 10, 2000 and any subsequent amendments as approved by Ecology. The following elements of the approved combined sewer overflow reduction plan shall be accomplished in accordance with the following schedule of milestone dates.

1. Implementation of the approved schedule shall begin immediately.

2. No later than **December 31, 2017**, any discharge of CSO shall meet all final State and Federal requirements applicable to such discharges.
3. Continue CSO discharge monitoring as approved in the October 28, 2008 amendments or subsequent Department of Ecology approved changes to the monitoring plan.
4. The City shall continue the use of and the maintenance of its public notification system ensuring that the public receives adequate notification of CSO occurrences and CSO impacts whether due to weather events or dry weather conditions. The elements of the system includes but is not limited to the following:
  - a) Posting of public notice signs in conspicuous locations near each CSO outfall and at locations used by river recreationists with pertinent information.
  - b) A mechanism to alert persons using all receiving water bodies affected by CSOs during and following CSO events.
  - c) A system to determine the nature and duration of conditions that are potentially harmful to users of the receiving water bodies due to CSOs.

In the third year of the permit, the permittee shall meet with the Department of Ecology and the Health District to review the current public awareness and education plan and revise as appropriate. The public awareness and education plan shall include information and education on the sources and significance of bacteria and other pollutants in the river and what citizens can do to protect the city's wastewater collection system and the river.

5. The City must to the maximum extent possible use native plants in restoration of riparian zone at CSO project sites within the regulated shoreline of the river. If it isn't possible to employ native plants the City must consult with the Department as the plant to be used.
6. The City must to the maximum extent possible use native plants in creation of "Storm Gardens" and similar means of reducing flows to CSOs. If it isn't possible to employ native plants the City must consult with the Department as the plant to be used.

#### H. Wet Weather Operation of Wastewater Treatment Facility.

CSO-related bypass of the secondary treatment portion of the Riverside Park Water Reclamation Facility is authorized when the instantaneous flow rate to the WWTP exceeds the storage capacity of the primary clarifiers as a result of precipitation events. Bypasses that occur when the instantaneous flow rate is less than primary clarifiers storage capacity are not authorized under this condition and are subject to the bypass provisions as stated in S5.F of the permit. In the event of a CSO-related bypass authorized under this condition, the Permittee must minimize the discharge of pollutants to the environment. At a minimum, CSO-related bypass flows must receive solids and floatables removal, primary clarification,

and disinfection. The final discharge must at all times meet the effluent limits of this permit as listed in S1.

The Permittee must maintain records of all CSO-related bypasses at the treatment plant. These records must document the date, duration, and volume of each bypass event, and the magnitude of the precipitation event. The records must also indicate the effluent flow rate at the time when bypassing is initiated. All occurrences of bypassing must be reported on a monthly and annual basis. The monthly report must include the above information and must be included in narrative form with the discharge monitoring report. The annual report must include all of the above information in summary format and should be reported in the annual CSO report per S13.

#### **S14. RECLAMATION AND REUSE**

##### **A. Reclamation and Reuse Pilot and Demonstration Projects**

When the permittee proposes a small scale pilot project for demonstration of concept and feasibility the permittee shall submit an engineering report (following the requirements of WAC 173-240 and WAC 173-219, once adopted) describing the project. The report must describe the project with appropriate design and operational detail and must be submitted to both the Departments of Health and Ecology for review and approval. The permittee will maintain communications with the Departments of Health and Ecology and assist them in providing oversight of the concept and project feasibility and possible long term implementation.

##### **B. Reclaimed Water Limitations ( Reserved for Future Use)**

##### **C. Reclaimed Water Monitoring Requirements ( Reserved for Future Use)**

##### **D. Reclamation and Reuse Implementation**

For long term implementation of reclamation and reuse pilot projects, this permit will be reopened and modified as necessary to provide special conditions related to reclamation and reuse as provided by permit General Condition G3.B.3.

The permittee shall prepare a water reuse plan, which contains a summary description of the proposed water reuse system as described in the approved Engineering Report. The plan and an application for permit modification shall be submitted to the Departments of Health and Ecology at least 180 days before the reclamation and reuse project becomes operational. The engineering report and reuse plan shall meet the requirements of the state of Washington's "Water Reclamation and Reuse Standards (1997)" and be approved by both the Departments of Health and the Department of Ecology prior to the construction or modification of facilities for producing reclaimed water.

The Permittee shall review the plan at least annually and the plan shall be updated whenever new uses or users are added to the distribution system. A copy of the revised plan shall be submitted to Ecology and Health. The plan shall contain, but not be limited to, the following:

1. Description of the reuse distribution system;
2. Identification of uses, users, location of reuse sites.
3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

E. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology.

F. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source
2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

G. Use Area Responsibilities

1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.

3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
4. Where the reclaimed water production, distribution and use areas are under direct control of the permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

#### H. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the permittee:

1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this Permit.
2. Reclaimed water uses, including runoff and spray, shall be confined to the designated and approved use areas. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.
3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement must be submitted to and approved by the Departments of Health and Ecology prior to implementation.
4. The Service and Use Area Agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the State Water Reclamation and Reuse Standards and restrictions outlined in the Service and Use Area Agreement. The Service and Use Area Agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.
5. No reclaimed water shall be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

#### I. Reclaimed Water Ordinance

The Permittee shall complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance shall provide the Permittee with the authority to terminate service of reclaimed water from any customer

violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

J. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) shall be submitted to the Washington Department of Ecology for approval.
2. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.
3. There shall be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.
4. The reclaimed water shall not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Cause long-term anaerobic conditions in the soil.
  - c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.
  - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

**S15. COMPLIANCE SCHEDULE**

The following compliance schedule is to implement the Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (TMDL), its waste load allocations and the Managed Implementation Plan. The Department acknowledges that, depending on how the environment responds to these actions the model results coming out of the “10 year assessment” may yield revised final equivalent effluent limitations (see Section 303(d)(4)(A) of the Clean Water Act).

The Department also acknowledges that the following schedule may need to be amended in the future. Any request must be based on new information including progress made and appropriate justification. Any modification to the compliance schedule would be made pursuant to 40 CFR 122.62 or 122.63, as appropriate.

A. Engineering Report Update

No later than **January 3, 2013**, two copies of an approvable Engineering Report must be prepared by the Permittee in accordance with WAC 173-240 and submitted to the Department for review and approval.

The Engineering Report must address the wastewater treatment processes needed to reliably comply with the CBOD<sub>5</sub>, NH<sub>3</sub> and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL, provide site options and piping and process options for future addition of process elements to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use."

The Engineering Report is to address the following topics based on rule requirements, pollutant equivalency consideration, potential for offset creation and management including trading, etc:

- 1) population projections by year for the next 20 years,
- 2) loading projections, flow, TP, CBOD, Ammonia, and TN;
- 3) wastewater treatment processes needed to reliably comply with the CBOD<sub>5</sub>, NH<sub>3</sub> and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL; including loadings potentially bypassed in a "blending event," and requiring an offset or pollutant equivalency consideration;
- 4) projection of loading removed for TP, CBOD, Ammonia, and TN;
- 5) projection of offset(s) and other actions needed for compliance with DO TMDL that reduce TP, CBOD and ammonia loadings to the final effluent and the river,
- 6) options considered to generate offset(s),
- 7) recommended offset option and/or other actions (such as water reclamation and offset generating options if projected to be needed)
- 8) timeline of offsets and other DO compliance actions to be needed and implementation schedule to achieve DO TMDL compliance,
- 9) site options and process options for future addition of process elements and offset generating activities to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use."
- 10) establish a ratio of total phosphorus (TP) to total reactive phosphorus (TRP) and a ratio of total reactive phosphorus (TRP) to bio-available phosphorus.
- 11) findings from the University of Washington / WERF bioavailability lab study.
- 12) subsequent monitoring and modeling of bioavailable phosphorus impacts in Lake Spokane.
- 13) the pounds of phosphorus that are not bio-available, not reactive and not a nutrient source that contribute to the total phosphorus waste load allocation
- 14) recommended adjustment potentially made to the effluent limitations needed for compliance with the DO TMDL because of non bio-available phosphorus in the effluent,
- 15) The plan update, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's Waste Load Allocations in ten (10) years.



- 16) Update analysis of CSO control options and no feasible alternative option for expansion of the treatment facilities to avoid “blending” of fully treated effluent and partially treated effluent during CSO events.

**B. Project Manual (Plans and Specifications)**

No later than **June 30, 2014** the Permittee shall submit to the Department for review and approval two copies of approvable plans and specifications in accordance with WAC 173-240 for upgrade of the existing wastewater treatment facility to meet the interim TP effluent limitations.

**C. Construction Quality Assurance Plan**

Prior to the start of construction, the Permittee shall submit to the Department a quality assurance plan as required by WAC 173-240.

**D. Verification of Construction and Start up Completion for Compliance with Spokane River and Lake Spokane DO TMDL**

No later than **March 1, 2018** the Permittee must submit a verification that the selected technology(s) have been installed and are optimally functional and ready to comply with the effluent limitations presented in permit conditions S1.B and be continuously operating.

**S16. Regional Toxics Task Force**

The permittee must participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force membership should include NPDES permittees in the Spokane River basin, conservation and environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Task Force will be to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal it is anticipated that the Task Force functions will include:

- (1) Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
- (2) Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
- (3) Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River;
- (4) Review proposed Toxic Management Plans, Source Management Plans, and BMPs;
- (5) Monitor and assess the effectiveness of toxic reduction measures;
- (6) Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force

and its members. This information shall be made publically available by means of a website and other appropriate means;

To discharge these functions the Task Force may:

- Provide for an independent community technical advisor funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public;

By **November 30, 2011**, the permittee shall provide Ecology with the details of the organizational structure, specific goals, funding mechanism and the governing documents of the Regional Toxics Task Force.

If Ecology determines the Task Force is failing to make measureable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

#### **S17. APPLICATION FOR PERMIT RENEWAL**

The Permittee shall submit an application for renewal of this permit by **January 1, 2016**.

## GENERAL CONDITIONS

### G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to the Department.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**G2. RIGHT OF INSPECTION AND ENTRY**

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

**G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - 3. A material change in quantity or type of waste disposal.
  - 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
  - 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
  - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.
2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

#### **G4. REPORTING PLANNED CHANGES**

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

**G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

**A. Transfers by Modification**

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

**G8. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G9. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G10. DUTY TO PROVIDE INFORMATION**

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

**G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G12. ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G13. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

**G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

**G15. UPSET**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

**G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**G17. DUTY TO COMPLY**

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G18. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

**G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this



Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

#### **G20. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

#### **G21. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

#### **G22. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

## APPENDIX A

### EFFLUENT CHARACTERIZATION FOR POLLUTANTS THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical “non-detects” in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>CONVENTIONALS</b>			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3- GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
pH	SM4500-H <sup>+</sup> B	N/A	N/A
<b>NONCONVENTIONALS</b>			
Total Alkalinity	SM2320-B		5 mg/L as CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E, 9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300
Ortho-Phosphate (PO <sub>4</sub> as P)	4500- PE/PF	3	10

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Phosphorus, Total (as P)	4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO <sub>4</sub> )	SM4110-B		200
Sulfide (as mg/L S)	4500-S <sup>2</sup> F/D/E/G		200
Sulfite (as mg/L SO <sub>3</sub> )	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO <sub>3</sub>
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
<b>METALS, CYANIDE &amp; TOTAL PHENOLS</b>			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
<b>DIOXIN</b>			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L
<b>VOLATILE COMPOUNDS</b>			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
<b>ACID COMPOUNDS</b>			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
<b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b>			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
<b>Benzo(j)fluoranthene (205-82-3)</b>	625	0.5	1.0
<b>Benzo(r,s,t)pentaphene (189-55-9)</b>	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
<b>Dibenzo (a,i)acridine (224-42-0)</b>	610M/625M	2.5	10.0
<b>Dibenzo (a,h)acridine (226-36-8)</b>	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
<b>3-Methyl cholanthrene (56-49-5)</b>	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
<b>Perylene (198-55-0)</b>	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
<b>PESTICIDES/PCBs</b>			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 <sup>10</sup>
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.

Issuance Date: September 29, 2011

Effective Date: November 1, 2011

Expiration Date: October 31, 2016

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA-000082-5**

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

Inland Empire Paper Company  
3320 N. Argonne Road  
Spokane, WA 99212

Facility Location:

3320 N. Argonne Road, Spokane, WA

Water Body I.D. No.:

57-1010

Industry Type:

Groundwood Pulp and Newsprint Mill

Receiving Water:

Spokane River

Discharge Location:

Latitude: 47.689167 N

Longitude: 117.266667 W

is authorized to discharge in accordance with the special and general conditions which follow.

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James M. Bellatty  
Water Quality Section Manager  
Eastern Regional Office  
Washington State Department of Ecology



**TABLE OF CONTENTS**

SUMMARY OF PERMIT REPORT SUBMITTALS.....4

**SPECIAL CONDITIONS**

S1. DISCHARGE LIMITATIONS.....7

    A. Process Wastewater Discharges

    B. Mixing Zone for Process Wastewater Outfall #001

S2. MONITORING REQUIREMENTS.....10

    A. Monitoring Schedule

    B. Sampling and Analytical Procedures

    C. Flow Measurement

    D. Laboratory Accreditation

S3. REPORTING AND RECORDKEEPING REQUIREMENTS .....12

    A. Reporting

    B. Records Retention

    C. Recording of Results

    D. Additional Monitoring by the Permittee

    E. Noncompliance Reporting

    F. Maintaining a Copy of This Permit

S4. TOTAL PHOSPHORUS, CBOD, AND AMMONIA BEST MANAGEMENT PRACTICES (BMP) PLAN.....14

S5. SCHEDULE OF COMPLIANCE FOR TOTAL PHOSPHORUS, CBOD, AND AMMONIA15

S6. PCB BEST MANAGEMENT PRACTICES (BMP) PLAN .....17

    A. PCB Source Identification Study

    B. PCB BMP Plan

S7. REGIONAL TOXICS TASK FORCE .....19

    A. Regional Toxics Task Force Approach

    B. Permittee Requirements

S8. OPERATION AND MAINTENANCE.....20

    A. Operations and Maintenance Manual

    B. Bypass Procedures

    C. Duty to Mitigate

S9. APPLICATION FOR PERMIT RENEWAL .....23

S10. SOLID WASTE DISPOSAL.....23

    A. Solid Waste Handling

    B. Leachate

    C. Solid Waste Control Plan

S11. NON-ROUTINE AND UNANTICIPATED DISCHARGES .....24

S12.	SPILL PLAN .....	25
S13.	ACUTE TOXICITY .....	25
A.	Effluent Characterization	
B.	Effluent Limit for Acute Toxicity	
C.	Monitoring for Compliance With an Effluent Limit for Acute Toxicity	
D.	Response to Noncompliance With an Effluent Limit for Acute Toxicity	
E.	Monitoring When There Is No Permit Limit for Acute Toxicity	
F.	Sampling and Reporting Requirements	
S14.	CHRONIC TOXICITY .....	29
A.	Effluent Characterization	
B.	Effluent Limit for Chronic Toxicity	
C.	Monitoring for Compliance With an Effluent Limit for Chronic Toxicity	
D.	Response to Noncompliance With an Effluent Limit for Chronic Toxicity	
E.	Monitoring When There Is No Permit Limit for Chronic Toxicity	
F.	Sampling and Reporting Requirements	
	GENERAL CONDITIONS .....	33
G1.	SIGNATORY REQUIREMENTS.....	33
G2.	RIGHT OF INSPECTION AND ENTRY .....	33
G3.	PERMIT ACTIONS.....	34
G4.	REPORTING PLANNED CHANGES .....	35
G5.	PLAN REVIEW REQUIRED .....	35
G6.	COMPLIANCE WITH OTHER LAWS AND STATUTES .....	36
G7.	TRANSFER OF THIS PERMIT .....	36
G8.	REDUCED PRODUCTION FOR COMPLIANCE .....	36
G9.	REMOVED SUBSTANCES .....	36
G10.	DUTY TO PROVIDE INFORMATION.....	37
G11.	OTHER REQUIREMENTS OF 40 CFR.....	37
G12.	ADDITIONAL MONITORING .....	37
G13.	PAYMENT OF FEES .....	37
G14.	PENALTIES FOR VIOLATING PERMIT CONDITIONS .....	37
G15.	UPSET .....	37
G16.	PROPERTY RIGHTS.....	38
G17.	DUTY TO COMPLY .....	38
G18.	TOXIC POLLUTANTS.....	38
G19.	PENALTIES FOR TAMPERING .....	38
G20.	REPORTING ANTICIPATED NON-COMPLIANCE.....	38
G21.	REPORTING OTHER INFORMATION.....	39
G22.	REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS .....	39
G23.	COMPLIANCE SCHEDULES .....	39

**SUMMARY OF PERMIT REPORT SUBMITTALS**

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	December 15, 2011
S3.E	Noncompliance Notification	As necessary	
S4	Total Phosphorus, CBOD, and Ammonia Best Management Practice (BMP) Plan		November 1, 2012
S4	Total Phosphorus, CBOD, and Ammonia BMP Plan Update	Annually	November 1, 2013
S5	Annual Status Report for Total Phosphorus, CBOD, and Ammonia	Annually	November 1, 2012
S5	Technology Selection Protocol		November 1, 2015
S5	Delta Elimination Plan		November 1, 2015
S5	Engineering Report for Treatment Technology		November 1, 2016
S5	Installation and Operation of Phosphorus Treatment Technology (confirmation letter)		November 1, 2018
S6.A	Scope of Work for PCB Source Identification Study		November 1, 2013
S6.B	PCB Best Management Practices (BMP) Plan		November 1, 2015
S6.B	PCB BMP Plan Update	Annually	November 1, 2016
S7	Regional Toxics Task Force		November 30, 2011
S8.A	Operations and Maintenance Manual		August 1, 2012
S8.A	Operation and Maintenance Update or Review Confirmation Letter	Annual	August 1, 2013
S8.B	Reporting Bypasses	As necessary	
S9	Application for Permit Renewal	1/permit cycle	April 30, 2015
S10.C	Solid Waste Control Plan	1/permit cycle	August 1, 2012
S10.C	Modification to Solid Waste Plan	As necessary	
S12	Spill Plan	1/permit cycle, updates submitted as necessary	August 1, 2012

Permit Section	Submittal	Frequency	First Submittal Date
S13.A	Acute Toxicity Characterization Data	4 consecutive quarters	March 1, 2012/60 days after each subsequent sampling event
S13.A	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S13.C	Acute Toxicity Compliance Monitoring Reports		May 1, 2013/60 days after each subsequent sampling event
S13.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S13.D	Acute Toxicity TI/TRE Plan	As necessary	
S13.E	Acute Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application
S14.A	Chronic Toxicity Characterization Data	4 consecutive quarters	March 1, 2012/60 days after each subsequent sampling event
S14.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S14.C	Chronic Toxicity Compliance Monitoring Reports		May 1, 2013/60 days after each subsequent sampling event
S14.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S14.D	Chronic Toxicity TI/TRE Plan	As necessary	
S14.E	Chronic Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	

Permit Section	Submittal	Frequency	First Submittal Date
G21	Reporting Anticipated Non-compliance	As necessary	
G22	Reporting Other Information	As necessary	

## SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

#### A. Process Wastewater Discharges

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

#### 1. Outfall #001 – March through October Limitations

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated process wastewater at the permitted location subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 001 March through October		
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
BOD <sub>5</sub> , lbs/day	1,101	1,555
TSS, lbs/day	4,525	8,450
Total Zinc, µg/L	203	296
Total Lead, µg/L	20.0 <sup>(1,2)</sup>	29.1 <sup>(1,3)</sup>
Total Cadmium, µg/L	2.8 <sup>(1,2)</sup>	4.1 <sup>(1,3)</sup>
pH <sup>c</sup>	Daily minimum is equal to or greater than 5.0 and the daily maximum is less than or equal to 9.0	
Parameter	Interim Limits <sup>d</sup>	
	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
Total Phosphorus (as P), lbs/day	24.7	49.7
Total Phosphorus, CBOD, and Ammonia BMP Plan	See Permit Condition S4.	
Total PCBs BMP Plan	See Permit Condition S6.	
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
<sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

<sup>c</sup> Indicates the range of permitted values. Any excursions below 4.0 and above 10.0 at any time are violations. The instantaneous maximum and minimum pH shall be reported monthly. When pH is continuously monitored, excursions between 4.0 and 5.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month.

<sup>d</sup> See Special Condition S5 for the Waste Load Allocations, and Schedule of Compliance, and Final Water Quality Based Effluent Limitations for total phosphorus, CBOD, and ammonia.

After the Permittee collects total PCB data according to the initial testing frequency in S2.A (April 30, 2013), Ecology will modify this permit to set an interim numeric effluent limit for total PCBs. The modified permit will be subject to normal factual and public review process prior to the final modification.

## 2. Outfall #001 – November through February Limitations

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated process wastewater at the permitted location subject to complying with the following limitations:

<b>EFFLUENT LIMITATIONS: OUTFALL # 001 November through February</b>		
<b>Parameter</b>	<b>Average Monthly<sup>a</sup></b>	<b>Maximum Daily<sup>b</sup></b>
BOD <sub>5</sub> , lbs/day	3,530	6,655
TSS, lbs/day	6,392	12,070
Total Zinc, µg/L	203	296
Total Lead, µg/L	20.0 <sup>(1,2)</sup>	29.1 <sup>(1,3)</sup>
Total Cadmium, µg/L	2.8 <sup>(1,2)</sup>	4.1 <sup>(1,3)</sup>
pH <sup>c</sup>	Daily minimum is equal to or greater than 5.0 and the daily maximum is less than or equal to 9.0	
<b>Parameter</b>	<b>Interim Limits<sup>d</sup></b>	
	<b>Average Monthly<sup>a</sup></b>	<b>Maximum Daily<sup>b</sup></b>
Total Phosphorus, CBOD, and Ammonia BMP Plan	See Permit Condition S4.	
Total PCBs BMP Plan	See Permit Condition S6.	

<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

<sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

<sup>c</sup> Indicates the range of permitted values. Any excursions below 4.0 and above 10.0 at any time are violations. The instantaneous maximum and minimum pH shall be reported monthly. When pH is continuously monitored, excursions between 4.0 and 5.0, or 9.0 and

10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month.

<sup>o</sup> After the Permittee collects total PCB data according to the initial testing frequency in S2.A (April 30, 2013), Ecology will modify this permit to set an interim numeric effluent limit for total PCBs. The modified permit will be subject to normal factual and public review process prior to the final modification.

## Footnotes:

<sup>(1)</sup> The method, method detection level (MDL) and quantitation level (QL) for lead and cadmium are as follows:

<b>Metal</b>	<b>Method (40 CFR Part 136)</b>	<b>MDL, µg/L</b>	<b>QL (3.14 x MDL), µg/L</b>
Lead	200.8	0.6	1.9
Cadmium	200.8	0.5	1.6

These QLs will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department by (nine months after effective date). The matrix specific MDL and QL shall be calculated as follows:

MDL = 3.14 x (standard deviation of 7 replicate spiked samples). This corresponds to the calculation of the method detection limit, as defined in 40 CFR Part 136, Appendix B, with the provision that the MDL be calculated for a specific effluent matrix.

The QL = 3.14 x MDL

Check standards at concentrations equal to the QL shall be analyzed alongside all compliance monitoring samples. Check standards shall be produced independently of calibration standards and maintained as a part of the Permittee's records. All check standard recovery data and duplicate measurements shall be submitted to the Department in the discharge monitoring report. The Department's precision goal is +/- 20%.

When the maximum daily effluent limit is greater than the QL, compliance determinations are made by direct comparison of the limit with the sample measurement. When the maximum daily effluent limit is less than the QL, samples measured below the QL may be in compliance with the effluent limit, and data in this range will usually not be used to support enforcement actions.

<sup>(2)</sup> Average values shall be calculated as follows: measurements below the MDL = 0; measurements greater than the MDL = the measurement.

<sup>(3)</sup> If the measured effluent concentration is below the QL as determined in Footnote #1 above, the Permittee shall report NQ for non-quantifiable.



**B. Mixing Zone for Process Wastewater Outfall #001**

The maximum boundaries of the mixing zones are defined as follows:

At the 7Q10 river flow, the mixing zone shall not utilize greater than 25 percent of the flow (dilution factor of 29.7; 3.4% effluent). A zone where acute criteria may be exceeded shall not utilize greater the 2.5 percent of the flow (dilution factor of 3.53; 28.3% effluent).

**S2. MONITORING REQUIREMENTS**

The Permittee shall monitor in accordance with the following schedule:

**A. Monitoring Schedule**

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Final Effluent (Outfall 001)	Flow	mgd	Effluent Monitoring Station	Continuous*	Meter
"	pH <sup>a</sup>	s.u.	"	"	"
"	Temperature	°F	"	"	"
"	BOD <sub>5</sub>	mg/L, lbs/day	"	5/week	24-hour composite
"	TSS	"	"	"	"
"	Total P (as P) <sup>b</sup>	ug/L, lbs/day	"	2/week	"
"	Total Reactive P (as P) <sup>b</sup>	ug/L, lbs/day	"	2/week	"
"	Total P (as P) <sup>c</sup>	"	"	1/week	"
"	Total Reactive P (as P) <sup>c</sup>	"	"	1/week	"
"	Total Zinc <sup>d</sup>	µg/L	"	1/month	"
"	Total Lead <sup>d</sup>	µg/L	"	"	"
"	Total Cadmium <sup>d</sup>	µg/L	"	"	"
"	Hardness (mg/L as CaCO <sub>3</sub> )	mg/L	"	"	"
"	CBOD <sub>5</sub>	mg/L, lbs/day	"	"	"
"	Ammonia (as N) <sup>e</sup>	mg/L, lbs/day	"	"	"
"	Total PCBs <sup>f</sup>	pg/L	"	1/2 months <sup>g</sup>	"
Production	-	MDT/day <sup>h</sup>	Paper Machine	Daily	Average Production

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Final Effluent (Outfall 001)	Acute Toxicity Testing	see S12.A.	Effluent Monitoring Station	1/quarter <sup>i</sup>	24-hour composite
“	Chronic Toxicity Testing	see S13.A.	“	“	“
* Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken four (4) times per day when continuous monitoring is not possible.					
<sup>a</sup> For facilities which continuously monitor and record pH values, the number of minutes the pH value was below or above the permitted range shall be recorded for each day and the total minutes for the month reported, the durations when values were above and below the permitted range shall be reported separately. The instantaneous maximum and minimum pH shall be reported monthly.					
<sup>b</sup> During the time period from March 1 to October 31. The phosphorus method detection and quantification levels shall also be reported with the results.					
<sup>c</sup> During the time period from November 1 to February 28 (29). The phosphorus method detection and quantification levels shall also be reported with the results.					
<sup>d</sup> Outfall 001 Metals (zinc, lead, and cadmium) shall be tested for total metals.					
<sup>e</sup> The ammonia method detection and quantification levels shall also be reported with the results.					
<sup>f</sup> Total PCBs for Outfall 001 shall be tested using a method that achieves a 50 pg/L target method detection limit, or lower, for all PCB congeners.					
<sup>g</sup> Monitoring frequency until April 30, 2013. Afterwards, the Permittee shall test for PCBs once per quarter.					
<sup>h</sup> Machine dry tons per day. The percentage of total production from deink and mechanical pulp shall also be specified.					
<sup>i</sup> Quarters are defined as follows: 1 <sup>st</sup> – January to March; 2 <sup>nd</sup> – April to June; 3 <sup>rd</sup> – July to September; and 4 <sup>th</sup> – October to December.					

#### B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, turbidity, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

### **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be postmarked or received no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within sixty (60) days after the sample date. The report(s) shall be sent to the Department of Ecology, Eastern Regional Office, 4601 N. Monroe, Spokane, Washington 99205.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

**B. Records Retention**

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

**C. Recording of Results**

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

**D. Additional Monitoring by the Permittee**

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

**E. Noncompliance Reporting**

1. The Permittee must immediately report the following occurrences of noncompliance:
  - a. any noncompliance that may endanger health or the environment;
  - b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part S4.B., "Bypass Procedures");
  - c. any upset that exceeds any effluent limitation in the permit (See G.16, "Upset");
  - d. any violation of limitations listed in Permit Condition S1.A.; or
  - e. any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

2. The Permittee must also provide a written report within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1, above. The written report must contain:
  - a. a description of the noncompliance and its cause;
  - b. the period of noncompliance, including exact dates and times;
  - c. the estimated time noncompliance is expected to continue if it has not been corrected;
  - d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
  - e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.
3. The Permittee must report all other instances of noncompliance, not required to be reported immediately, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in S3.E.2 above.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

The Permittee shall maintain a copy of this permit at the facility.

**S4. TOTAL PHOSPHORUS, CBOD, AND AMMONIA BEST MANAGEMENT PRACTICES (BMP) PLAN**

The goal of this BMP plan is to maintain or lower effluent concentrations of total phosphorus, CBOD, and ammonia at or below current discharge levels.

By November 1, 2012, the Permittee shall develop a BMP plan and submit it to the Department for review and approval. The objective of this plan is to identify pollution prevention and wastewater reduction opportunities for these three parameters. The plan shall include the following:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list shall include the name of a designated team leader.
2. A description of current and past BMPs and their effectiveness.
3. Identification of technical/economical evaluation of new BMPs. BMPs should include: substitution of materials; reformulation or redesign of products; modification of equipment, facilities, technology, processes, and procedures; and improvement in management, inventory control, materials handling or general operational phases of the facility.

4. A schedule for implementation of economically feasible BMPs.
5. Methods used for measuring progress towards the BMP goal and updating the BMP plan.
6. Results from testing of any wastestreams (not already required under Special Condition S3. of this permit) for total phosphorus, CBOD, and ammonia taken in support of the BMP plan.

Thereafter, the Permittee shall submit an annual report to the Department by November 1<sup>st</sup> of every year. The annual report shall include: a) all BMP plan monitoring results for the year; b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; and c) any updates to the BMP plan.

This permit may be modified, or revoked and reissued, to revise or remove the requirements of this Section based on information collected under this Section.

#### **S5. SCHEDULE OF COMPLIANCE FOR TOTAL PHOSPHORUS, CBOD, AND AMMONIA**

<b>Target Pursuit Action</b>	<b>Compliance Date</b>
Annual Status Reports <sup>a</sup>	November 1 <sup>st</sup> of each year
Delta Elimination Plan <sup>b</sup>	November 1, 2015
Technology Selection Protocol for Treatment Technology <sup>c</sup>	November 1, 2015
Engineering Report for Treatment Technology <sup>d</sup>	November 1, 2016
Phosphorus Treatment Technology	Must be installed and operational by November 1, 2018 <sup>e</sup>
Meet Final Water Quality Based Effluent Limits <sup>f</sup>	November 1, 2021 (unless a longer compliance schedule becomes available under RCW 90.48.605).
<sup>a</sup> The Annual Status Report shall, at a minimum, include detailed updates on the treatment technology (status of report preparation, construction, and/or performance reviews, etc.) and delta elimination plans (status of report preparation, implementation progress, accounting of delta credits earned and expended, etc.). The report shall also include an assessment on the progress of meeting the final water quality based effluent limits (WQBELs) through the combination of treatment technology and delta elimination.	
<sup>b</sup> Delta elimination plan will include a schedule for other phosphorus, CBOD and ammonia removal actions such as conservation, effluent re-use, and supporting regional non-point source control efforts to be established.	

The delta elimination plan may also include:

- A demonstration that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment and is not a nutrient source. This demonstration must consider findings and recommendations from the University of Washington/ WERF bioavailability lab study and the DO TMDL Implementation Advisory Committee. The demonstration may also include results from subsequent monitoring and modeling of bio-available phosphorus. Ecology will recognize the demonstration, that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment and is not a nutrient source through a modification to the Spokane River DO TMDL. Ecology will incorporate any revised WQBELs based on the modified DO TMDL by the second permit cycle, or earlier.
- Any approved trades between Permittees and/or nonpoint sources to reduce nutrients (total phosphorus, CBOD, and ammonia) to the Spokane River and Lake Spokane consistent with the Water Quality Trading Framework developed by Ecology the DO TMDL Implementation Advisory Committee.
- An analysis, subject to Ecology approval and public review and comment, that provides a pollutant loading equivalency relating phosphorus, CBOD and ammonia.
- Implementation of a 'bubble limit' concept for interested Spokane River dischargers where the sum of all wasteload allocations becomes a cap or bubble. Under the bubble limit concept, a discharger is not considered in violation of their individual WQBEL, as long as the collective bubble limit is met during the same reporting period.

The delta elimination plan, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's final WQBELs by June 1, 2021 (unless a longer compliance schedule becomes available under RCW 90.48.605).

<sup>c</sup> A comprehensive technology selection protocol for choosing the most effective feasible technology for seasonally removing the applicable pollutant from the effluent. If pilot testing is a part of the protocol, there will be appropriate provisions for quality assurance and control. The protocol will include a preliminary schedule for construction of the treatment technology. Ecology will recognize the results from pilot testing and full-scale implementation of technologies installed prior to issuance of this permit.

<sup>d</sup> After the Permittee implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen technology, including any updates to the construction schedule. The Engineering Report will (if necessary) be accompanied by amendments to the schedule and substance of the target pursuit actions so that in combination with the Engineering Report on expected technology performance, there is reasonable assurance of meeting the final WQBELs by November 1, 2021 (unless a longer compliance schedule becomes available under RCW 90.48.605).

<sup>e</sup> The Permittee must confirm the installation and operation of the phosphorus treatment technology in writing to the Department.

<sup>f</sup> The Waste Load Allocations for ammonia, total phosphorus, and CBOD are 24.29, 1.23, and 123.2 lbs/day seasonal average from March to October, respectively (0.71, 0.036, and 3.6 mg/L, respectively, at a discharge flow of 4.1 mgd). The final WQBEL for total phosphorus of 2.39 lbs/day seasonal average from February to October (0.070 mg/L at 4.1 mgd) is equivalent to the wastewater allocation for total phosphorus. The final WQBELs are shown below:

<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October</b>	
<b>Parameter</b>	<b>Season Average</b>
Ammonia, lbs/day	24.29
CBOD, lbs/day	123.2

<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 February through October</b>	
Total Phosphorus, lbs/day	2.39

Compliance with these limitations will be determined by the mass of pollutant measured in the effluent combined with any credits from the Delta Elimination Plan following Ecology approval and public review and comment.

Ecology will provide an allowance for the seasonal average nutrient concentrations in the facility's non-contact cooling water toward meeting the final WQBELs; to the extent nutrient concentrations in the groundwater supply for NCCW are statistically equivalent to nutrient concentrations in the Spokane River upstream of the site. The Department plans to validate the relationship between the non-contact cooling water supply and river water nutrient levels during this permit cycle. This validation will include sample results from at least one critical season (February to October) for both the NCCW supply and upstream river water. Methods to incorporate the allowance for nutrients in the NCCW toward meeting the final WQBELs will be included in the next permit cycle. The allowance and the terms of the allowance will be subject to public notice and comment.

The Department may adjust the final water quality based effluent limitations on the basis of new information on the ratio of ortho phosphorus to total phosphorus in the effluent. An adjustment to the effluent limitations based on a new ratio of ortho phosphorus to total phosphorus will be consistent with the assumptions and wasteload allocations in the Spokane River DO TMDL and, as such, does not require a modification to the DO TMDL.

The Department may adjust the final water quality based effluent limitations on the basis of new information following a revision to the Spokane River DO TMDL. This new information may include: the ratio of ortho phosphorus to total phosphorus in the effluent, the fraction of bio-available phosphorus in the effluent and alternate modeled water quality based effluent limits extended into February or January. Any adjustment of the final effluent limitations that result in less stringent limitations must ensure that the dissolved oxygen responsibility for Avista identified in Table 7 of the DO TMDL remains unchanged as determined through the use of the DO TMDL model and is subject to the provisions of the Clean Water Act for deriving limitations in section 303(d)(4)(A), 42 U.S.C. § 1313(d)(4)(A) as well as the anti-backsliding provisions of the Clean Water Act, including the exceptions in section 402(o)(2) of the Clean Water Act, 33 U.S.C. § 1342(o)(2).

## **S6. PCB BEST MANAGEMENT PRACTICES (BMP) PLAN**

The goal of the BMP plan is to maintain or lower effluent concentrations of PCBs through source control, pollution prevention and/or wastewater reduction opportunities.



The Permittee must also investigate and attempt to identify sources of PCBs in the process wastewater discharged through Outfall 001 by submitting a scope of work for a PCB Source Identification Study, completing the Study, and reporting the results.

A. PCB Source Identification Study

The Permittee must submit a scope of work for a PCB source identification study by November 1, 2013. The scope of work shall include a list of raw materials used at the facility which may contain PCBs (based on industry experience and/or literature review), a site review identifying where PCB containing equipment was/may have been used, a sampling plan with proposed raw material and other sampling locations, quality control protocols, sampling protocols, and PCB test methods.

Upon approval of the scope of work by the Department, the Permittee shall complete the study. The Permittee shall submit a report of the results within two years of approval of the scope of work and incorporate the findings in the BMP Plan below.

B. PCB BMP Plan

By November 1, 2015, the Permittee shall develop a PCB BMP plan and submit it to the Department for review and approval. The plan shall include the following:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list shall include the name of a designated team leader.
2. A description of current and past source identification, source control, pollution prevention, and wastewater reduction efforts and their effectiveness.
3. Identification of technical/economical evaluation of new BMPs. BMPs should include, but are not limited to: modification of equipment, facilities, technology, processes, and procedures; source control; remediation of any contaminated areas, etc.
4. A schedule for implementation of economically feasible BMPs.
5. Methods used for measuring progress towards the BMP goal and updating the BMP plan.
6. Results from testing of any wastestreams (not already required under Special Condition S3. of this permit) for PCBs taken in support of the PCB BMP plan and PCB Source Identification Study.

Thereafter, the Permittee shall submit an annual report to the Department by June 1 of every year. The annual report shall include: a) all BMP plan monitoring results for the year; b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; and c) any updates to the BMP plan.

This permit may be modified, or revoked and reissued, to revise or remove the requirements of this Section based on information collected under this Section.

## **S7. REGIONAL TOXICS TASK FORCE**

### **A. Regional Toxics Task Force Approach**

The goal of the Regional Toxics Task Force (Task Force) is to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal, Ecology anticipates that the Task Force functions will:

1. Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River.
2. Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs sources and of other toxics on the 2008 year 303(d) list for the Spokane River.
3. Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River.
4. Review proposed Toxic Management Plans, Source Management Plans, and BMPs.
5. Monitor and assess the effectiveness of toxic reduction measures.
6. Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force and its members. This information shall be made publicly available by means of a website and other appropriate means.

To discharge these functions the Task Force may provide for an independent community technical advisor funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public.

The Task Force should include NPDES permittees in the Spokane River, conservation/environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests.

If Ecology determines the Regional Toxics Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

### **B. Permittee Requirements**

1. The permittee shall participate in a cooperative effort to create the Task Force and participate in the functions of the Task Force.

2. By November 30, 2011, the Permittee in conjunction with other Ecology issued NPDES permit holders, or if agreement is not reached among the permit holders, the Permittee itself shall provide Ecology with a recommended organizational structure for the Task Force including roles and responsibilities, specific goals for the Task Force, recommended governing documents for the functioning of the Task Force, and the identification of funding options for the functioning of the Task Force.
3. Following the review of the November 30, 2011 submittal, or submittals if agreement is not reached among the permit holders, Ecology shall provide a charter for the Task Force including roles and responsibilities of the members thereof and the specific goals of the Task Force.

## **S8. OPERATION AND MAINTENANCE**

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

### **A. Operations and Maintenance Manual**

An updated Operation and Maintenance (O&M) Manual shall be submitted to the Department for approval by August 1, 2012. It shall conform to the requirements of WAC 173-240-150. In addition to the requirements of WAC 173-240-150(1) and (2), the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Plant maintenance procedures.
3. The treatment plant process control monitoring schedule.

The O&M Manual shall be reviewed by the Permittee at least annually and the Permittee shall confirm this review by letter to the Department. Substantial changes or updates to the O&M Manual shall be submitted to the Department for review and approval whenever they are incorporated into the manual.

The approved Operations and Maintenance Manual shall be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

A Treatment System Operating Plan (TSOP) shall be submitted to the Department as the initial chapter of the updated O&M Manual. This chapter shall be entitled the "Treatment System Operating Plan." For the purposes of this NPDES permit, a TSOP is a concise summary of specifically defined elements of the O&M Manual. The TSOP shall not conflict with the O&M Manual and shall include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1 at the production levels used in developing these limitations.
2. In the event of production rates, which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

An updated Treatment System Operating Plan (TSOP) shall be submitted to the Department with the application for renewal 180 days prior to expiration of the permit. This plan shall be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.

**B. Bypass Procedures**

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

**S9. APPLICATION FOR PERMIT RENEWAL**

The Permittee shall submit an application for renewal of this permit by April 30, 2015.

**S10. SOLID WASTE DISPOSAL**

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall submit a solid waste control plan to the Department no later August 1, 2012. This plan shall include all solid wastes with the exception of those solid wastes regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The plan shall include at a minimum a description, source, generation rate, and disposal methods of these solid wastes. This plan shall not be at variance with any approved local solid waste management plan. Any proposed revision or modification of the solid waste handling plan must be submitted to the Department. The Permittee shall comply with the plan and any modifications thereof. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal 180 days prior to the expiration date of the permit.

**S11. NON-ROUTINE AND UNANTICIPATED DISCHARGES**

- A. Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater on a case-by-case basis if approved by the Department. Prior to any such discharge, the Permittee shall contact the Department and **at a minimum** provide the following information:
1. The nature of the activity that is generating the discharge.
  2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  3. The total volume of water expected to be discharged.
  4. The results of the chemical analysis of the water. The water shall be analyzed for all constituents limited for the Permittee's discharge. The analysis shall also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by the Department. All discharges must comply with the effluent limitations as established in Condition S1 of this permit, water quality standards, sediment management standards, and any other limitations imposed by the Department.
  5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate shall be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
  6. If the proposed discharge is to a municipal storm drain and is approved by the Department, the Permittee shall notify the municipality of the discharge.
- B. The discharge cannot proceed until the Department has reviewed the information provided and has authorized the discharge. Authorization from the Department will be by letter to the Permittee or by an Administrative Order.

**S12. SPILL PLAN**

The Permittee shall by August 1, 2012 submit to the Department an update to the existing Spill Control Plan for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters. The Permittee shall review and update the Spill Plan, as needed, at least annually. Changes to the plan shall be sent to the Department. The plan and any supplements shall be followed throughout the term of the permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

**S13. ACUTE TOXICITY****A. Effluent Characterization**

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC<sub>50</sub>). The percent survival in 100% effluent shall also be reported.

Testing shall begin within sixty (60) days of the permit effective date.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).



2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%.
2. Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

**The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).**

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.B of this permit. The ACEC equals 28.3% (effluent dilution factor of 3.53).

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant

difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC<sub>50</sub> and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used, and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

#### **S14. CHRONIC TOXICITY**

##### **A. Effluent Characterization**

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within sixty (60) days of the permit effective date.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

##### **B. Effluent Limit for Chronic Toxicity**

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

**The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).**

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.B pursuant to WAC 173-201A-100. The CCEC equals 3.4% effluent (dilution factor of 29.7).

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used, and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

## GENERAL CONDITIONS

### G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to the Department.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

### G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:



- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

### **G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - 3. A material change in quantity or type of waste disposal.
  - 4. A determination the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
  - 5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
  - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
  - 1. A material change in the condition of the waters of the state.
  - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.
  2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

#### **G4. REPORTING PLANNED CHANGES**

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

- 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b);
- 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices.

Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### **G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

**A. Transfers by Modification**

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

**G8. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G9. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G10. DUTY TO PROVIDE INFORMATION**

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

**G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G12. ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G13. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

**G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

**G15. UPSET**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### **G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### **G17. DUTY TO COMPLY**

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### **G18. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### **G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

#### **G20. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

**G21. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

**G22. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. One hundred micrograms per liter (100 µg/L).
  - 2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. Five hundred micrograms per liter (500µg/L).
  - 2. One milligram per liter (1 mg/L) for antimony.
  - 3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

**G23. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

**POLLUTION CONTROL HEARINGS BOARD  
STATE OF WASHINGTON**

SIERRA CLUB and CENTER FOR  
ENVIRONMENTAL LAW & POLICY,

Appellant,

v.

STATE OF WASHINGTON,  
DEPARTMENT OF ECOLOGY and  
SPOKANE COUNTY,

Respondent.

PCHB No. 11-184

FINDINGS OF FACT, CONCLUSIONS OF  
LAW, AND ORDER

Appellants Sierra Club and Center for Environmental Law and Policy (collectively Sierra Club) appealed the NPDES Permit issued by the Department of Ecology (Ecology) to Spokane County for its Regional Water Reclamation Facility (Facility), NPDES Permit No. WA-0093317 (NPDES Permit or Permit). Prior to the hearing on the merits, the Board issued an order on partial summary judgment concluding that the Facility is a new discharger as defined by 40 C.F.R. § 122.2. *Sierra Club v. Dep't of Ecology*, PCHB No. 11-184 (Order Granting Partial Summary Judgment, Jan. 8, 2013). One issue was presented for hearing: Does the NPDES Permit No. WA-0093317 unlawfully authorize PCB discharges that will cause or contribute to a violation of water quality standards, including 40 C.F.R. section 122.4 and WAC 173-201A Part III?

The Board held a hearing in this matter on March 25-28, 2013, at the Board's offices in Tumwater, Washington. The Board hearing the case was comprised of Kathleen D. Mix and

FINDINGS OF FACT, CONCLUSIONS  
OF LAW AND ORDER  
PCHB No. 11-184

1 Tom McDonald. Administrative Appeals Judge Joan M. Marchioro presided for the Board.  
2 Attorney Richard A. Smith represented Sierra Club. Attorneys John R. Nelson and Lori Terry  
3 Gregory represented the County. Senior Counsel Ronald L. Lavigne represented Ecology. Kim  
4 Otis of Olympia Court Reporters of Olympia, Washington provided court-reporting services.

5 The Board received the sworn testimony of witnesses, admitted exhibits, and reviewed  
6 the arguments on behalf of the parties. Having fully considered the record, the Board enters the  
7 following:

## 8 FINDINGS OF FACT

### 9 1.

10 The Spokane River begins in northern Idaho at the outlet of Lake Coeur d'Alene and  
11 flows west 112 miles where it joins the Columbia River. *Ex. A-12* at 12. Approximately 33  
12 miles of the Spokane River forms the southern border of the Spokane Indian Reservation.  
13 Crossley Testimony; *Ex. A-12* at 12.

### 14 2.

15 Pursuant to Section 303(d) of the federal Clean Water Act (CWA), Ecology<sup>1</sup> is required  
16 to prepare a list every two years of water bodies that do not meet water quality standards (303(d)  
17 list). 33 U.S.C. § 1313(d). Fifteen water body segments of the Spokane River and Lake  
18 Spokane, and one segment of the Little Spokane River are on Washington's current 303(d) list  
19 for not meeting Washington state human health water quality criteria for polychlorinated  
20 biphenyls (PCBs) in edible fish tissue. *Ex. A-12* at 11.

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21 <sup>1</sup> The Legislature designated Ecology as the state water pollution control agency responsible for implementing the  
CWA in Washington. RCW 90.48.260.



1 3.

2 Under Washington's water quality standards, the chronic fresh water criterion for aquatic  
3 organisms is 14,000 pg/L. WAC 173-201A-240 (Table 240(3)). The human health water quality  
4 criterion for PCBs applicable in Washington is taken from the National Toxics Rule, which  
5 establishes an ambient water criteria of 170 pg/L and a fish tissue criteria of 5.3 ng/g. 40 CFR §  
6 131.36. Washington's water quality standards identify harvesting as a designated use of the  
7 Spokane River. WAC 173-201A-602 (Table 602). The Spokane Tribe, which received  
8 treatment as a state status under the CWA in 2003, promulgated its own human health water  
9 quality criterion for PCBs. Crossley Testimony. The Spokane Tribe's PCB water quality  
10 criterion is 3.37 pg/L for ambient water and 0.1 ng/g in fish tissue. *Ex. A-12* at 13. Harvesting is  
11 one of the designated uses of the Spokane River under the Spokane Tribe's water quality  
12 standards. Crossley Testimony.

13 4.

14 Although banned from production and use in 1979, PCBs are legacy pollutants that  
15 continue to persist in the environment. *Exs. Ecy-2* at 17, *A-12* at 11, 27. The principal uses for  
16 PCBs are as insulating fluids, plasticizers, lubricants and fluids for hydraulic machinery, vacuum  
17 pumps and compressors. *Id.* Despite being banned, PCBs continue to be introduced into the  
18 environment and are found in wastewater sent to treatment facilities. DeFur Testimony; Rawls  
19 Testimony; *Ex. R-37* (Toxic Substance Control Act allows inadvertently generated PCBs in  
20 products). Due to their stability and resistance to degradation, PCBs are extremely persistent in  
21

1 the environment and are one of the most ubiquitous of all environmental contaminants. *Ex. A-12*  
2 at 28. EPA has classified PCBs as “probable human carcinogens.” *Id.* at 11.

3 5.

4 In 2009, the Washington State Department of Health (DOH) issued a fish advisory for the  
5 Spokane River for PCBs and PBDEs (flame retardants). *Exs. A-31, A-32. See also Ex. A-26*  
6 (August 2011 DOH Health Consultation discussing the potential cumulative health effects  
7 associated with eating fish from the Spokane River and stating that fish advisory should remain  
8 in place). DOH’s fish advisory contains specific fish consumption recommendations: (1) all fish  
9 caught in the portion of the Spokane River upstream of the Upriver Dam should not be eaten; (2)  
10 Largescale Suckers caught between Nine Mile Dam and the Upriver Dam should not be eaten;  
11 and (3) limit consumption of several fishes caught in Lake Spokane (Rainbow Trout and Yellow  
12 Perch two meals per week; Mountain Whitefish one meal per week; Brown Trout and Largescale  
13 Sucker one meal per week). *Exs. A-31, A-32.* Finally, the fish advisory identifies ways to  
14 prepare fish for consumption that will help reduce exposure to PCBs. *Id.*

15 6.

16 Under CWA Section 303(d), when a water body is included on the state’s 303(d) list, a  
17 Total Maximum Daily Load (TMDL) for the pollutant parameter is to be prepared. 33 U.S.C. §  
18 1313(d). A TMDL determines the amount of a given pollutant that can be discharged to a water  
19 body and still meet standards (loading capacity) and allocates that load among the various  
20 sources (load allocation). *Ex. A-34* at 11, 73-81. During 2003-2004, Ecology conducted a  
21 TMDL assessment for PCBs in the Spokane River. *Id.* at 9. Ecology issued a draft PCB TMDL

1 for the Spokane River in June 2006. *Ex. A-34*. The TMDL was not finalized, in part, because  
2 the draft report had deficiencies in monitoring data, especially relating to stormwater discharges,  
3 and Ecology was unable to identify more than 43% of the sources of PCBs being discharged into  
4 the Spokane River. Bellatty Testimony. Ecology also concluded that it did not have sufficient  
5 information to impose the proposed load allocations in the TMDL on known dischargers. *Id.*

6 7.

7 In April 2011, Ecology issued the Spokane River PCB Source Assessment 2003-2007  
8 (Source Assessment). *Ex. A-12*. The Source Assessment included the PCB monitoring data  
9 collected by Ecology from September 2003 through May 2004. *Ex. A-12, Appendix B*. Ecology  
10 decided to prepare the Source Assessment in order to keep track of the data collected through the  
11 PCB TMDL analysis and to convert the TMDL data from draft to final form. Bellatty  
12 Testimony. The only updated data in the Source Assessment that was not included in the draft  
13 TMDL was for stormwater discharges. *Id.*; *Ex. A-12* at 68-76.

14 8.

15 The Source Assessment identified several sources of PCBs discharged to the Spokane  
16 River. *Ex. A-12* at 91. The sources include (a) effluent from industrial and municipal facilities  
17 (Inland Empire Paper, Kaiser Trentwood, Liberty Lake Wastewater Treatment Plant (WWTP),  
18 City of Spokane WWTP), (b) urban stormwater runoff, (c) the Spokane River at the state line  
19 with Idaho, and (d) the Little Spokane River. *Ex. A-12* at 92-98. PCB contribution from  
20 groundwater and atmospheric deposition were considered minimal and, as a result, not  
21 quantified. *Ex. A-12* at 91.

1 9.

2 Efforts to clean up and reduce sources of PCBs in the Spokane River have been pursued  
3 over the past several years. DeFur Testimony; Bellatty Testimony. In 2006, contaminated  
4 sediments were removed from behind the Upriver Dam and a three-layer cap was installed over  
5 the remaining sediments. *Id.* In 2007, PCB clean up occurred on Donkey Island and at the  
6 Kaiser facility, both of which are located upstream of the Upriver Dam. Bellatty Testimony. *Id.*  
7 A 2011 settlement between the City of Spokane and the Spokane Riverkeeper requires the City  
8 to conduct PCB source control reductions into its stormwater system. Bellatty Testimony.  
9 Ecology is monitoring the City of Spokane's work under the settlement, which has included the  
10 removal of PCB contaminated sediments. *Id.*

11 10.

12 Spokane County Public Utilities Division provides wastewater collection and treatment  
13 services to residential, commercial and industrial customers within Spokane County. Rawls  
14 Testimony; *Ex. R-9* at 1-1. Until recently, under the terms of an interlocal agreement with the  
15 City of Spokane, the County's wastewater was sent to the City of Spokane Riverside Park Water  
16 Reclamation Facility (City Plant) for treatment. *Id.* Under that agreement, the City Plant is to  
17 treat up to 10 MGD of County generated wastewater. *Id.* The NPDES permit for the City Plant  
18 includes a compliance schedule requiring the City to upgrade its treatment system in order to  
19 meet the requirements of the TMDL addressing dissolved oxygen. Koch Testimony; *Ex. R-43* at  
20 8, 51-53. It is expected that the treatment technology selected will result in higher PCB removal  
21 from the effluent discharged by the City Plant. Koch Testimony.

11.

Starting in 1980, Spokane County began expanding its sewer collection system to facilitate the conversion of septic tanks to sewer service as a means to protect the Spokane Aquifer. *Id.* The sewer system expansion is expected to continue through 2015 and result in approximately 9,000 additional septic tank customers connecting to the sewer system. *Id.* In order to address the additional customers converting from septic tanks as well as anticipate population growth in the region, in 2001 Spokane County prepared a Wastewater Facilities Plan (Facilities Plan). Rawls Testimony; *Ex. R-10*. The purpose of the Facilities Plan was to provide a long-term management strategy for Spokane County and to identify a phased implementation program designed to meet wastewater capacity and treatment requirements over the next 25 years. *Ex. R-10* at ES-1.

12.

One element of the Facilities Plan was the construction of a new wastewater treatment plant (Facility). *Ex. R-10* at ES-10-12. The Facility's construction is planned for three phases to allow for increases in wastewater collection. Under Phase I, which was completed in 2011, the Facility can accept and treat up to 8 MGD of wastewater. Rawls Testimony; *Ex. Ecy-2* at 4. Phase II provides for expansion of treatment capacity to 12 MGD in approximately 2030 and Phase III would increase treatment capacity to 24 MGD annual average flow. *Id.* Spokane County will continue to use its 10 MGD of capacity at the City Plant to address any influent received in excess of the existing facility capacity. Rawls Testimony.

13.

Segments of the Spokane River and Lake Spokane are included on the 303(d) list for pollutants other than PCBs. In 2010, Ecology finalized the Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (DO TMDL), Publication No. 07-10-073. *Ex. R-8* at ES-1. The DO TMDL assessed various pollutants being discharged into the Spokane River and Lake Spokane which affect DO: ammonia, total phosphorous, and carbonaceous biochemical oxygen demand. *Id.* at ES-2. The DO TMDL includes load allocations for the Spokane County Facility for those pollutants. *Id.* at ES-3 – ES-4.

14.

Construction of the Facility was completed in 2011, with start-up and testing occurring in August 2011 and treated effluent discharged to the Spokane River in December 2011. *Ex. Ecy-2* at 4. The Facility is located at 1004 North Freya Street and its outfall discharges to the Spokane River at River Mile 78.7. *Ex. Ecy-2* at 2, 13. At the present time, the Facility treats and discharges 7 MGD of wastewater. Rawls Testimony. When the Facility reaches its design capacity of 8 MGD, excess wastewater will be routed to the City Plant for treatment. Rawls Testimony. The Facility does not discharge to a segment of the Spokane River on the 303(d) list for PCBs. Braley Testimony.

15.

In June 2010, Spokane County prepared an amendment to its Facilities Plan. *Ex. R-8*. The purpose of the amendment was to update the Facilities Plan to address changes that had occurred, including the selection of the treatment technology and the publication of the DO

1 TMDL. *Ex. R-8* at ES-1. The treatment technology selected by Spokane County is a step-fed  
2 nitrification/denitrification treatment system with membrane filtration and chlorination, also  
3 referred to as advanced tertiary treatment. *Ex. R-8* at ES-1; Koch Testimony; Abusaba  
4 Testimony.

5 16.

6 The influent into and effluent discharged from the Facility will contain PCBs. Koch  
7 Testimony, DeFur Testimony, Abusaba Testimony. Due to their persistence and prevalence in  
8 the environment, reducing the discharge of PCBs into the Spokane River requires the  
9 implementation of source control activities and use of advanced treatment technology. Koch  
10 Testimony, Rawls Testimony. The advanced tertiary treatment technology employed at the  
11 Facility is AKART and will result in high quality removal of PCBs, as well as address the  
12 requirements of the DO TMDL and the 1998 Dissolved Metals TMDL. Abusaba Testimony,  
13 Koch Testimony; *Ex. Ecy-2* at 13-19. By providing tertiary treatment, the Facility offers the  
14 most advanced treatment of effluent available and deploys the best currently available treatment  
15 technology to reduce the discharge of PCBs to the Spokane River at potentially undetectable  
16 levels. Abusaba Testimony; Rawls Testimony; Koch Testimony. Limited sampling of effluent  
17 from the Facility shows a high removal of PCBs. Abusaba Testimony; Koch Testimony; *Ex. A-*  
18 *35*.

19 17.

20 The use of advanced tertiary treatment results in effluent that meets Class A standards  
21 and would be suitable for re-use. Rawls Testimony; *Ex. R-9* at 5-1. As part of the

1 implementation of the DO TMDL, Spokane County was required to develop a comprehensive  
2 plan for reclaimed water production, reuse, and aquifer recharge of effluent. *Ex. R-12* at 1. In  
3 2009, Spokane County issued its Reclaimed Water Study assessing the potential for reclaimed  
4 water use. *Ex. R-12*. The study concluded that “[w]hile the use of reclaimed water in Spokane  
5 County is feasible from a technical perspective, it could be infeasible from a financial  
6 perspective unless alternative funding sources become available . . . .” *Ex. R-12* at 72; Rawls  
7 Testimony. One reuse option investigated by Spokane County was the feasibility of restoring of  
8 wetlands at Saltese Flats. Rawls Testimony; *Ex. A-24*. Other reuse options are possible,  
9 including industrial reuse and aquifer recharge. Rawls Testimony.

10 18.

11 Spokane County applied to Ecology for a NPDES permit for the Facility on September  
12 30, 2010. *Ex. Ecy-2* at 10. Richard Koch, a water quality specialist with Ecology’s Eastern  
13 Regional Office, was assigned to review the application and prepare the NPDES permit. Koch  
14 Testimony. Mr. Koch was also the permit manager for the City Plant. *Id.*

15 19.

16 In preparing the NPDES Permit for the Facility, one issue of concern was the discharge  
17 of PCBs into the Spokane River and whether the Permit should contain an effluent limit for  
18 PCBs. *Ex. Ecy-2* at 31; Koch Testimony. Ecology’s Permit Writer’s Manual and EPA’s  
19 Technical Support Document (TSD) provide guidance for determining whether an effluent limit  
20 is necessary and, if so, how to calculate such a limit. *Exs. A-17* at VI-25-VI-41; *A-20* at 50-51.  
21 Regarding the first question, is an effluent limit required, the permit writer is to determine



1 whether the discharge has a reasonable potential to cause or contribute to a violation of water  
2 quality standards. *Id.* If the analysis shows that there is a reasonable potential, then the permit  
3 writer evaluates whether there is sufficient information to develop a numeric effluent limit for  
4 the pollutant(s) of concern. *Id.*

5 20.

6 With respect to PCBs, conflicting evidence was presented regarding whether Mr. Koch  
7 performed a reasonable potential analysis. The Permit Fact Sheet states in places that a  
8 reasonable potential analysis was performed. *Ex. Ecy-2* at 21, 30-31, 33-34. However,  
9 Appendix D of the Fact Sheet, which contains the spreadsheet for the reasonable potential  
10 analysis, does not include PCBs as one of the pollutants analyzed. *Ex. Ecy-2*, App. D. At the  
11 hearing, Mr. Koch testified that he did not conduct a reasonable potential analysis for PCBs  
12 because he did not have sufficient data to do so. Koch Testimony.

13 21.

14 EPA's TSD provides guidance on how to determine a permit limit when there is no  
15 effluent monitoring data for a specific facility and lists various information sources that can be  
16 used to perform a reasonable potential analysis. *Ex. A-20* at 50-51. Sources of information  
17 identified include fish advisories or bans and existing data on toxic pollutants. *Id.* Mr. Koch  
18 testified that he was aware of the DOH fish advisory but did not consider the information  
19 pertinent to the reasonable potential to pollute analysis because fish migrate. Koch Testimony.  
20 With respect to existing data on toxic pollutants, Mr. Koch testified that he considered the PCB  
21 load reductions contained in the Source Assessment for purposes of permit structure, not

1 reasonable potential. Koch Testimony. Mr. Koch testified that he did not consider using that  
2 information for a reasonable potential analysis because he did not have monitoring data on PCB  
3 removal from tertiary treatment and it would be too speculative to include the load reduction in  
4 the Fact Sheet. Koch Testimony. As for the PCB monitoring data collected for the Source  
5 Assessment, which is set out in Table 7 of the Fact Sheet, Mr. Koch testified that he did not use  
6 that data because it had been collected several years earlier and he would want more recent data  
7 to conduct a reasonable potential analysis. Koch Testimony; *Ex. Ecy-2* at 14-15.

8 22.

9 Because he determined that he had insufficient data to perform a reasonable potential  
10 analysis for PCBs, Mr. Koch did not calculate a numeric effluent for inclusion in the Permit.  
11 Koch Testimony. Instead, as permitted by EPA regulation, Mr. Koch crafted a narrative effluent  
12 limit comprised of best management practices (BMPs). Koch Testimony; 40 C.F.R.  
13 122.44(k)(3). The BMPs are contained in Condition S12 and Condition S13. Similar conditions  
14 are included in the NPDES permits of other point source dischargers to the Spokane River whose  
15 effluent contains PCBs. Koch Testimony; Bellatty Testimony; *Ex. Ecy-2* at 33. The other  
16 municipal dischargers on the Spokane River will soon be employing tertiary treatment for  
17 phosphorus reduction, which will likely reduce PCBs as well. *Ex. Ecy-2* at 33; Koch Testimony.

18 23.

19 Condition S12 requires Spokane County to prepare an Annual Toxics Management  
20  
21

Report (Report) for Ecology's review and approval.<sup>2</sup> *Ex. Ecy-1* at 46. The Report is to identify

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<sup>2</sup>Condition S12 provides in full:

**S12. Toxics Source Control Action Plan**

- A. An Annual Toxics Management Report shall be prepared by the County and submitted to Ecology on an annual basis for review and evaluation on the toxics management effort. The Report shall be submitted **by April 15**. Activities planned for toxics reduction in the subsequent year of operation shall be jointly reviewed and agreed upon. The toxics of specific concern for this report are PCBs; 2,3,7,8 TCDDs and PBDE.

The Toxics Management Report shall include the toxics monitoring results with attached laboratory data sheets shall be submitted to Ecology (ERO Water Quality Program permit manager and the urban waters staff) annually. After each year of sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the Permittee and Ecology (ERO Water Quality Program Permit Manager and the urban waters staff) will review the data, including pattern analysis of homologs, detection limits, QA/QC procedures and a draft action plan listing identified sources, potential sources suggested by data analysis and future source identification activities. Annually the Permittee and Ecology will confer and revise the locations and frequency of the raw sewage sampling in the collection system for these pollutants.

The Toxics Management Plan must address source control and elimination of PCBs from:

- Contaminated soils and sediments,
- Storm water entering the wastewater collection system,
- Industrial and commercial sources.

As an element of the pretreatment program the City and County will expand the scope of their inspections and monitoring to include PCBs and other toxics as appropriate. The PCB monitoring must follow an Ecology approved QAPP.

A model QAPP has been published by Ecology and is available at <http://www.ecy.wa.gov/biblio/eap.html>.

The action is to address of eliminating active sources such as,

- Older mechanical machinery
- Older electrical equipment and components,
- Construction material content such as paints and caulking
- Commercial materials such as ink and dyes.

The Permittee is to consider changes in procurement practices and ordinances control and minimize toxics, including preferential use of PCB free substitutes for those products containing PCBs below the regulated level of 5 ppm, in sources such as:

- Construction material content such as paints and caulking
- Commercial materials such as ink and dyes,
- Soaps and cleaners.

The Permittee (individually or in collaboration with other dischargers) must also prepare public media educating the public about the difference between products free of PCBs and those labeled non-PCB but which contain PCBs below the TOSCA regulatory threshold of 5 ppm.

1 toxic reduction efforts planned for the subsequent year of operation and those actions are  
2 required to be jointly reviewed and agreed upon by Ecology and Spokane County. *Id.* The goals  
3 of the resulting Toxics Management Plan are to reduce toxicant loadings, including PCBs, to the  
4 Spokane River by reducing concentrations in the Facility's influent as well as reducing PCBs in  
5 the effluent discharged. *Id.* at 47. Through a Toxics Management Plan, Spokane County is  
6 required to address source control and elimination of PCBs in (a) contaminated soils and  
7 sediments, (b) stormwater entering the wastewater collection system and (c) industrial and  
8 commercial sources. *Id.* Condition S12 also requires Spokane County, through its pretreatment  
9 program, to expand inspections and monitoring of PCBs received from its customers and to  
10 consider changing its procurement practices to prefer the use of materials with no or very low  
11 PCBs. *Id.* at 46-47.

12 24.

13 Condition S13 requires Spokane County to participate in the creation of a Regional  
14 Toxics Task Force (Task Force) and to participate in its functions thereafter. *Ex. Ecy-1* at 47.  
15 The goal of the Task Force is to "develop a comprehensive plan to bring the Spokane River into  
16 compliance with applicable water quality standards for PCBs." *Id.* Condition S13 identifies

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17 The effluent monitoring results shall be compiled and analyzed by Ecology for the purpose of  
18 establishing a performance based PCB effluent limitation for the following permit cycle.

The goals of the Toxics Management Plan are:

- 19 • To reduce toxicant loadings, including PCBs, to the Spokane River to the maximum  
20 extent practicable realizing statistically significant reductions in the influent  
concentration of toxicants to the SCRWRP over the next 10 years.
- 21 • Reduce PCBs in the effluent to the maximum extent practicable so  
that in time the effluent does not contribute to PCBs in the  
Spokane River exceeding applicable water quality standards.

1 activities that Ecology “anticipates” the Task Force will undertake, including collecting  
2 additional data on PCBs, analyzing the existing PCB data, preparing recommendations for  
3 controlling and reducing sources of PCBs to the Spokane River, and monitoring and assessing  
4 the effectiveness of toxic reduction measures. *Id.* at 48. Condition S13 does not include any  
5 specific deadlines or criteria that the Task Force is required to meet, providing instead that if  
6 Ecology determines that “measureable progress” toward meeting applicable water quality criteria  
7 for PCBs is not being made, “Ecology would be obligated to proceed with development of a  
8 TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality  
9 standards are met.” *Id.* Bruce Rawls, Utilities Director for the Spokane County Division of  
10 Utilities, testified that the Task Force has been formed, the members agreed to a Memorandum  
11 of Agreement governing its operation, and work is proceeding on developing a cleanup plan in  
12 2013. Rawls Testimony; *Ex. R-21*.

13 25.

14 EPA’s TSD provides that if, after evaluation of available data on the effluent and in the  
15 absence of effluent monitoring data, the permit writer determines that a reasonable potential  
16 analysis cannot be performed, the permittee can be required to monitor and test its effluent.  
17 Koch Testimony; *Ex. A-20* at 51. Pursuant to that guidance, the Permit requires Spokane County  
18 to prepare a Quality Assurance Project Plan (QAPP) detailing its water quality sampling and  
19 analysis protocols for, among other parameters, PCBs. Koch Testimony; *Ex. Ecy-1* at 36-37.  
20 The QAPP is to be submitted to Ecology for its review and approval. *Id.* Spokane County  
21 submitted its QAPP to Ecology and received agency approval. Rawls Testimony; *Exs. R-5, R-6*.

1 Under the QAPP, samples will be analyzed for PCBs using EPA Method 1668. Koch  
2 Testimony, *Ex. R-6* at 11. EPA has not approved Method 1668 for compliance purposes but it  
3 can be used for monitoring. Koch Testimony. EPA Method 1668 is more refined than the  
4 compliance protocol, Method 608, with a reporting limit of 10 pg/L per congener. Abusaba  
5 Testimony; *Ex. R-6* at 11. The effluent monitoring results for PCBs will allow Ecology to  
6 perform a reasonable potential analysis and develop a numeric effluent limit for the following  
7 permit cycle. Koch Testimony, Bellatty Testimony; *Ex. R-1* at 9-10 (n. h).

8 26.

9 Any Conclusion of Law deemed to be properly considered a Finding of Fact is hereby  
10 adopted as such.

11 Based upon the foregoing Findings of Fact, the Board enters the following:

12 **CONCLUSIONS OF LAW**

13 1.

14 The Board has jurisdiction over the subject matter and the parties pursuant to RCW  
15 43.21B.110(1)(d). The burden of proof is on the appealing party as to the legal issue in the case.  
16 WAC 371-08-485(3). The Board considers the matter *de novo*, giving deference to Ecology's  
17 expertise in administering water quality laws and on technical judgments, especially where they  
18 involve complex scientific issues. *Port of Seattle v. Pollution Control Hearings Board*, 151  
19 Wn.2d 568, 593-94, 90 P.3d 659 (2004). Pursuant to WAC 371-08-540(2), "In those cases  
20 where the board determines that the department issued a permit that is invalid in any respect, the  
21

1 board shall order the department to reissue the permit as directed by the board and consistent  
2 with all applicable statutes and guidelines of the state and federal governments.”

3 2.

4 The CWA was enacted with the broad policy objective of restoring and maintaining the  
5 chemical, physical, and biological diversity of the nation’s waters. 33 U.S.C. §1251(a).  
6 Congress created the NPDES permit program to further this goal. *Puget Soundkeeper Alliance v.*  
7 *Ecology*, 102 Wn. App. 783, 788, 9 P.3d 892 (2000). In Washington State, EPA delegated  
8 authority to Ecology to administer the NPDES permit program.

9 3.

10 As required by state and federal law, Spokane County sought and obtained from Ecology  
11 an NPDES Permit authorizing the discharge of treated effluent from the Facility to the Spokane  
12 River. Sierra Club challenged the Permit alleging, in part, that an EPA regulation prohibited the  
13 issuance of an NPDES Permit to Spokane County for an effluent discharge to the Spokane River  
14 that includes PCBs. The legal issue in this case, as identified in the February 17, 2012, Pre-  
15 Hearing Order is: Does the NPDES Permit No. WA-0093317 unlawfully authorize PCB  
16 discharges that will cause or contribute to a violation of water quality standards, including 40  
17 C.F.R. section 122.4 and WAC 173-201A Part III?

18 4.

19 According to Sierra Club, because the Spokane River is included on the 303(d) list for  
20 PCBs and Ecology has not prepared a TMDL, pursuant to 40 CFR §122.4(i) Ecology is barred  
21 from issuing a permit to a new discharger that will cause or contribute to a violation of water

1 quality standards. In support of its interpretation of 40 CFR §122.4(i), Sierra Club relies on  
2 *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9<sup>th</sup> Cir. 2007), *cert. denied*, 129 S.Ct. 896  
3 (2009), where the court overturned EPA’s issuance of an NPDES permit to a new discharger. In  
4 response, Spokane County and Ecology claim that Sierra Club misreads 40 CFR §122.4(i),  
5 arguing that the regulation is inapplicable because the Facility is not discharging to a segment of  
6 the Spokane River included on the 303(d) list for PCBs. They further assert that the court’s  
7 analysis in *Pinto Creek* does not apply as the new discharger in that case was discharging to a  
8 segment that was included on Arizona’s 303(d) list.

9 5.

10 EPA promulgated regulations implementing the NPDES permitting program. 40 CFR  
11 Part 122. Pertinent to this case is 40 CFR §122.4(i), which governs the instance where a new  
12 discharger seeks to discharge a pollutant into a water body that exceeds water quality standards  
13 for that pollutant. Section 122.4 provides in relevant part:

14 No permit may be issued:

15 . . .

16 (i) To a new source or a new discharger if the discharge from its  
17 construction or operation will cause or contribute to the violation of  
18 water quality standards. The owner or operator of a new source or  
19 new discharger proposing to discharge into a water segment which  
20 does not meet applicable water quality standards or is not expected to  
21 meet those standards . . . and for which the State or interstate agency  
has performed a pollutants load allocation for the pollutant to be  
discharged, must demonstrate, before the close of the public comment  
period, that:

(1) There are sufficient remaining pollutant load allocations to allow  
for the discharge; and



1 (2) The existing dischargers into that segment are subject to  
2 compliance schedules designed to bring the segment into compliance  
3 with applicable water quality standards.

4 40 CFR §122.4. As the Board previously held, the Facility is a new discharger. *Sierra Club v.*  
5 *Dep't of Ecology*, PCHB No. 11-184 (Order Granting Partial Summary Judgment, Jan. 8, 2013).

6 6.

7 The Board concludes that the court's holding in *Pinto Creek* is not applicable in this  
8 instance. In *Pinto Creek*, EPA issued an NPDES permit for a mine that proposed a new  
9 discharge to Pinto Creek, a river included on Arizona's 303(d) list as not meeting water quality  
10 standards for dissolved copper. *Pinto Creek*, 504 F.3d at 1009. The construction and operation  
11 of the mine would result in the discharge of dissolved copper into an impaired segment of Pinto  
12 Creek. *Id.* In response to an appeal of the initial NPDES permit issued to the mine, EPA  
13 withdrew portions of the permit and prepared a dissolved copper TMDL for Pinto Creek. *Id.* at  
14 1010. Environmental groups appealed the second NPDES permit alleging, in part, that 40 CFR  
15 §122.4(i) prohibited EPA from issuing a permit to discharge dissolved copper into a segment of  
16 the river listed as impaired under CWA Section 303(d). *Id.* As the court in *Pinto Creek*  
17 recognized, that section in its entirety "addresses the situation where a new source seeks to  
18 permit a discharge of pollutants into a stream already exceeding its water quality standards for  
19 that pollutant."<sup>3</sup> *Id.* at 1011. The court then went on to analyze the exceptions to the prohibition  
20 on permit issuance contained in the first sentence of 40 CFR §122.4(i). *Id.* at 1012-15.

21 <sup>3</sup> As one commentator noted, the court's decision in *Pinto Creek* "was the first federal court decision that squarely  
addressed the interconnection between CWA Section 303(d), TMDLs, the NPDES permitting program, and EPA's

1 7.

2 In this case, unlike the mine in *Pinto Creek*, the Facility discharges into a segment of the  
3 Spokane River that is not on Washington’s 303(d) list for PCBs nor is there an applicable TMDL  
4 establishing load allocations for dischargers. With the exception of the court’s recognition of  
5 the prohibitory language in the first sentence of 40 CFR §122.4(i), the court’s analysis of the  
6 remainder of that regulation is not germane to this case. The test applied to the NPDES Permit  
7 issued to Spokane County is whether, under its terms and conditions, it authorizes a discharge  
8 that causes or contributes to a violation of PCB water quality standards in the Spokane River.  
9 See 40 CFR §122.4(i) (permit may not issue to new discharger if discharge will “cause or  
10 contribute to the violation of water quality standards”); 40 CFR §122.44(d)(1)(i) (all NPDES  
11 permits shall include conditions necessary to achieve water quality standards and must control all  
12 pollutants that “are or may be discharged at a level which will cause, have the reasonable  
13 potential to cause, or contribute to an excursion above any State water quality standard . . . .”)

14 8.

15 As described above, when preparing an NPDES permit the permit writer is to determine  
16 if the discharge has a reasonable potential to cause or contribute to a violation of water quality  
17 standards. 40 CFR §122.44(d)(1)(i); *Exs. A-17* at VI-25-VI-30, *A-20* at 50-51. If it is  
18 determined that the discharge contains a pollutant that has the reasonable potential to cause or  
19 contribute to a violation, then the permit must include an effluent limit for that pollutant. 40

20  
21 40 C.F.R. §122.4(i) impaired waters regulation.” See, R. Flynn, *New Life for Impaired Waters: Realizing the Goal to ‘Restore’ the Nation’s Waters Under the Clean Water Act*, 10 Wyoming L.R. 35, 51 (2010).

1 CFR §122.44(d)(1)(iii). Where development of a numeric effluent limit is infeasible, the permit  
2 shall contain BMPs to control or abate the discharge of the pollutant. 40 CFR §122.44(k).

3 9.

4 The Board received conflicting evidence regarding whether Ecology performed a  
5 reasonable potential analysis for PCBs. The Permit Fact Sheet states that a reasonable potential  
6 analysis was performed. *Ex. Ecy-2* at 21, 30-31, 33-34. Ecology's permit writer, Mr. Koch,  
7 testified that he did not perform a reasonable potential analysis for PCBs because there was  
8 insufficient data to perform the analysis. Koch Testimony. EPA's TSD lists factors that a  
9 regulatory authority can consider when performing a reasonable potential analysis. *Ex. A-20* at  
10 50-51. Information regarding several of those factors was available to Ecology including: (a)  
11 the type of publicly owned treatment plant seeking a permit (background information on the  
12 Facility supplied by Spokane County); (b) available dilution for the effluent (Fact Sheet  
13 discusses dilution provided by Spokane River); (c) existing data on toxic pollutants (PCB  
14 monitoring data in Source Assessment, effluent will include some quantity of PCBs); (d) the  
15 state's list of waters not meeting water quality standards; and (e) fish advisories or bans (DOH's  
16 fish advisories for the Spokane River). See *Exs. A-12, A-26, A-31, A-32, Ecy-2*; Testimony of  
17 Koch, Rawls, DeFur, Abusaba.

18 10.

19 The Board concludes that Ecology should have used this data to conduct a reasonable  
20 potential analysis for PCBs. The Board also concludes that the evidence presented supports the  
21 conclusion that there is a reasonable potential for the discharge from the Facility to cause or

1 contribute to a violation of water quality standards. Under applicable regulations, once it is  
2 determined that a reasonable potential exists, the next step is the determination of an effluent  
3 limit for PCBs. 40 CFR §122.44(d)(1)(iii).

4 11.

5 Mr. Koch testified that calculation of a numeric effluent limit for PCBs was infeasible  
6 due to the limitations of the available data. Koch Testimony. Sierra Club did not present  
7 evidence to the contrary. The Board recognizes that the PCB monitoring data included in the  
8 Source Assessment was collected a number of years ago and that several PCB clean up actions  
9 have occurred in the Spokane River in the interim. Testimony of DeFur, Bellatty; *Ex. A-12*. As  
10 Mr. Koch testified, those factors limited the usefulness of that data in developing a numeric limit.  
11 While the Board finds that there was sufficient data available for Ecology to conduct a  
12 reasonable potential analysis, we concur with Mr. Koch's determination that the data was not  
13 adequate for preparation of a numeric effluent limit for PCBs. The Board defers to the technical  
14 expertise of Ecology on this matter and accepts his conclusion that calculation of a numeric  
15 effluent limit for PCBs was not feasible.

16 12.

17 Because calculation of a numeric effluent was not feasible, Ecology was required to  
18 include BMPs, or narrative effluent limits, in the permit to control the discharge of PCBs from  
19 the Facility. 40 CFR §122.44(k). The CWA defines "effluent limit" to include "any restriction  
20 established by a State or the Administrator on quantities, rates, and concentrations of chemical,  
21 physical, biological, and other constituents which are discharged from point sources into

1 navigable waters . . . .” 33 U.S.C. § 1362(11). Accordingly, Ecology sought to include  
2 narrative effluent limits in the Permit, Conditions S12 and S13, designed to address PCB  
3 loadings to both the Facility and the Spokane River. Koch Testimony; *Ex. Ecy-1* at 46-48. The  
4 Board concludes that, as written, Conditions S12 does not provide sufficient assurance that the  
5 contemplated PCB control and reduction activities will occur. The Board further concludes that  
6 Condition S13 does not constitute a narrative effluent limit.

7 13.

8 Condition S12, while it has elements of an effective program for control and reduction of  
9 PCBs, fails as a narrative effluent limitation in several respects. In its current form, Condition  
10 S12 is confusing, vague, and lacks definition of key terms. More importantly, it lacks deadlines  
11 by which Spokane County is to undertake and/or complete actions to reduce PCBs in influent to  
12 the facility (e.g. the Plan "must address source control and elimination. . ."). It lacks mandatory  
13 language requiring Spokane County to actually undertake necessary actions to achieve  
14 reductions in PCBs in both influent and effluent (e.g. Spokane County "is to consider changes in  
15 procurement practices. . ."). While Condition S12 sets goals, the standards against which  
16 Spokane County will be measured for accomplishment of those goal are long term and vague in  
17 nature. Finally, rather than requiring Spokane County to meet water quality standards, Condition  
18 S12 only asks that the County take steps so that "in time the effluent does not contribute to PCBs  
19 in the Spokane River exceeding applicable water quality standards." While the Board has said a  
20 narrative effluent limitation may be utilized in circumstances such as are present in this case, the  
21 language of Condition S12 falls far short of such a limitation. The Permit must require Spokane

County to comply with water quality standards, and, if a narrative effluent limitation is used due to the infeasibility of a numeric limit, that narrative limit must require defined steps toward compliance with standards.

14.

Condition S12 requires Spokane County to prepare and submit to Ecology an Annual Toxics Management Report (Report). Condition S12 identifies several measures that must be included in the Report that are aimed at reducing the PCB content in the influent to the Facility, including, (1) source control and elimination in certain areas (contaminated soils, storm water, industrial/commercial sources); (2) expanded inspections and monitoring as part of the pretreatment program; (3) elimination of active sources; (4) changes in procurement practices and ordinances; and (5) preparation of a public media campaign. Other than requiring their inclusion in the Report, Condition S12 does not require Spokane County to take affirmative steps to implement these measures. The Permit is remanded to Ecology to reissue the Permit with deadlines and mandatory requirements for identification and implementation of these measures to reduce PCBs in the Facility's influent.

15.

The Permit sets forth a long term and undefined goal for the ultimate reduction of toxicant loadings, including PCBs, to the River, both with respect to influent concentration and ultimate compliance with water quality standards. Condition S12 requires a reduction of toxicant loading to the "maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants" to the wastewater treatment facility over a ten year period.

1 These terms are undefined and fail to inform Spokane County and others as to what will suffice  
2 to meet this standard. On remand, Ecology shall modify the provisions of Condition S12 to  
3 identify the expected reductions in toxicant loadings, the schedule for initiating such reductions,  
4 and at a minimum, offer greater definition and timelines for/of this expected outcome.

5 16.

6 Condition S12's second goal, to "[r]educe PCBs in the effluent to the maximum extent  
7 practicable so that in time the effluent does not contribute to PCBs in the Spokane River  
8 exceeding applicable water quality standards" is equally frail. As stated previously, the Permit  
9 must require compliance with water quality standards, not set an amorphous goal of some future  
10 date of compliance. The Permit requires Spokane County to monitor its discharge to the  
11 Spokane River. *Ex. Ecy-1* at 36-38. With regard to toxic pollutants, including PCBs, Spokane  
12 County was required to prepare a QAPP and submit it to Ecology for review and approval. *Id.* at  
13 38. Under the QAPP, approved by Ecology November 1, 2012, effluent from the Facility will be  
14 analyzed for PCBs using EPA's Method 1668, which has a lower detection limit than the  
15 analytical methods approved by EPA for use in NPDES permits. Abusaba Testimony. Data  
16 obtained from the effluent monitoring will be used to develop a numeric effluent limit for  
17 inclusion in the next permit. Koch Testimony; Bellatty Testimony; *Ex. Ecy-1* at 9-10 (n. h).  
18 Preliminary monitoring data collected from the Facility's state of the art tertiary treatment works,  
19 which constitutes AKART, shows high quality removal of PCBs. Abusaba Testimony.  
20 Additional sampling rounds need to occur to validate those results and to develop a numeric  
21 effluent limit. Abusaba Testimony, Koch Testimony. Pursuant to Permit Condition G3 and 40

1 CFR § 122.62, Ecology has the authority to modify the Permit before its expiration in November  
2 2016 to include a numeric effluent for PCBs. On remand, Ecology shall modify this provision of  
3 Condition S12 to require the use of ongoing monitoring data to set a numeric effluent limitation  
4 at the earliest possible time, including during the term of the current permit, in order to be in  
5 compliance with water quality standards.

6 17.

7 Condition S13 requires Spokane County to participate in the creation of a Regional  
8 Toxics Task Force and in the functions of the Task Force. *Ex. Ecy-1* at 47. The stated goal of  
9 the Task Force is to develop a plan to bring the Spokane River into compliance with applicable  
10 PCB water quality standards. *Id.* Similar to Condition S12, Condition S13 does not require that  
11 those goals be achieved by a specified date. Nor does Condition S13 establish an objective  
12 standard against which its accomplishments can be measured, providing instead that if Ecology  
13 concludes that the Task Force is “failing to make measurable progress” then the agency would be  
14 obligated to prepare a TMDL for PCBs or an alternative to ensure compliance with water quality  
15 standards. *Id.* at 48. Condition S13 is not a narrative effluent limit as it does not impose any  
16 restrictions on quantities, rates, and concentrations of PCBs being discharged from point sources  
17 into the Spokane River. While the Board finds that the creation of the Task Force is a positive  
18 step toward bringing the Spokane River into compliance with water quality standards for PCBs,  
19 it is uncertain that the Task Force will achieve any of its stated goals or achieve a measurable  
20 reduction in the discharge of PCBs. Although the actions undertaken by the Task Force are  
21 necessary to address the water quality problems in the Spokane River, the work of the Task



Force cannot be used as a defense if Spokane County is not meeting the terms of the Permit. Ecology is directed on remand to modify Condition S13 to make clear that compliance with the Permit's requirements takes precedence over the work of the Task Force.

18.

When preparing the Permit, Ecology conducted Tier I and Tier II antidegradation analyses under WAC 173-201A-310. *Ex. Ecy-2* at 16-22. Based on those analyses, Ecology concluded that the discharge from the Facility would not cause a measurable increase in the concentrations of PCBs in the Spokane River. *Id.* Sierra Club failed to offer evidence rebutting Ecology's antidegradation analyses. The Board concludes that the Permit does not authorize a discharge that violates the antidegradation policy of the state's water quality standards, WAC 173-201A Part III.

19.

Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such.

Having so found and concluded, the Board enters the following

### **ORDER**

Having concluded that portions of NPDES Permit No. WA-0093317 are invalid, the Board REMANDS the Permit to Ecology pursuant to WAC 371-08-540, for reissuance consistent with this opinion:

1. Ecology shall modify Condition S12, the "Toxics Source Control Action Plan" provision consistent with this opinion by

- 1 (a) including deadlines and mandatory requirements for identification and  
2 implementation of measures to reduce PCBs in the Facility's influent;  
3 (b) identifying the expected reductions in toxicant loadings and the schedule  
4 for initiating such reductions;  
5 (c) requiring the use of ongoing monitoring data to set a numeric effluent  
6 limitation at the earliest possible time.

- 7 2. Ecology shall modify Condition S13, the "Regional Toxics Task Force" provision  
8 consistent with this opinion by clearly stating that compliance with the Permit's  
9 requirements takes precedence over the work of the Task Force.

10 SO ORDERED this 19<sup>th</sup> day of July, 2013.

11 POLLUTION CONTROL HEARINGS BOARD

12  
13 KATHLEEN D. MIX, Chair

14 TOM MCDONALD, Member  
15

16  
17 JOAN M. MARCHIORO, Presiding  
18 Administrative Appeals Judge  
19  
20  
21